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18174	54358	CJU100507	30236	66420	PAE202838	42297	78481	YPS003349
18175	54359	CJU100519	30237	66421	PAE202854	42298	78482	YPS003356
18176	54360	CJU100520	30238	66422	PAE202921	42299	78483	YPS003357
18177	54361	CJU100524	30239	66423	PAE202922	42300	78484	YPS003367
18178	54362	CJU100533	30240	66424	PAE202929	42301	78485	YPS003368
18179	54363	CJU100534	30241	66425	PAE202951	42302	78486	YPS003371
18180	54364	CJU100535	30242	66426	PAE202957	42303	78487	YPS003373
18181	54365	CJU100536	30243	66427	PAE202959	42304	78488	YPS003375
18182	54366	CJU100537	30244	66428	PAE202960	42305	78489	YPS003376
18183	54367	CJU100538	30245	66429	PAE202962	42306	78490	YPS003380
18184	54368	CJU100543	30246	66430	PAE202963	42307	78491	YPS003382
18185	54369	CJU100546	30247	66431	PAE202964	42308	78492	YPS003384
18186	54370	CJU100547	30248	66432	PAE202965	42309	78493	YPS003387
18187	54371	CJU100550	30249	66433	PAE202966	42310	78494	YPS003389
18188	54372	CJU100558	30250	66434	PAE202970	42311	78495	YPS003399
18189	54373	CJU100562	30251	66435	PAE202974	42312	78496	YPS003402
18190	54374	CJU100565	30252	66436	PAE202975	42313	78497	YPS003406
18191	54375	CJU100575	30253	66437	PAE202976	42314	78498	YPS003414
18192	54376	CJU100577	30254	66438	PAE202988	42315	78499	YPS003417
18193	54377	CJU100584	30255	66439	PAE203000	42316	78500	YPS003419
18194	54378	CJU100586	30256	66440	PAE203012	42317	78501	YPS003420
18195	54379	CJU100590	30257	66441	PAE203021	42318	78502	YPS003421
18196	54380	CJU100593	30258	66442	PAE203026	42319	78503	YPS003424
18197	54381	CJU100594	30259	66443	PAE203027	42320	78504	YPS003425
18198	54382	CJU100600	30260	66444	PAE203032	42321	78505	YPS003432
18199	54383	CJU100601	30261	66445	PAE203042	42322	78506	YPS003443
18200	54384	CJU100602	30262	66446	PAE203081	42323	78507	YPS003446

DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
18201	54385	CJU100605	30263	66447	PAE203086	42324	78508	YPS003447
18202	54386	CJU100617	30264	66448	PAE203102	42325	78509	YPS003448
18203	54387	CJU100619	30265	66449	PAE203103	42326	78510	YPS003452
18204	54388	CJU100620	30266	66450	PAE203110	42327	78511	YPS003454
18205	54389	CJU100622	30267	66451	PAE203113	42328	78512	YPS003458
18206	54390	CJU100624	30268	66452	PAE203114	42329	78513	YPS003462
18207	54391	CJU100628	30269	66453	PAE203132	42330	78514	YPS003466
18208	54392	CJU100629	30270	66454	PAE203139	42331	78515	YPS003469
18209	54393	CJU100636	30271	66455	PAE203146	42332	78516	YPS003474
18210	54394	CJU100638	30272	66456	PAE203155	42333	78517	YPS003477
18211	54395	CJU100643	30273	66457	PAE203160	42334	78518	YPS003478
18212	54396	CJU100645	30274	66458	PAE203161	42335	78519	YPS003483
18213	54397	CJU100646	30275	66459	PAE203166	42336	78520	YPS003494
18214	54398	CJU100649	30276	66460	PAE203177	42337	78521	YPS003496
18215	54399	CJU100651	30277	66461	PAE203193	42338	78522	YPS003498
18216	54400	CJU100654	30278	66462	PAE203199	42339	78523	YPS003500
18217	54401	CJU100659	30279	66463	PAE203203	42340	78524	YPS003502
18218	54402	CJU100660	30280	66464	PAE203206	42341	78525	YPS003510
18219	54403	CJU100661	30281	66465	PAE203208	42342	78526	YPS003517
18220	54404	CJU100662	30282	66466	PAE203256	42343	78527	YPS003520
18221	54405	CJU100663	30283	66467	PAE203264	42344	78528	YPS003522
18222	54406	CJU100664	30284	66468	PAE203270	42345	78529	YPS003528
18223	54407	CJU100668	30285	66469	PAE203277	42346	78530	YPS003531
18224	54408	CJU100669	30286	66470	PAE203294	42347	78531	YPS003539
18225	54409	CJU100672	30287	66471	PAE203299	42348	78532	YPS003542
18226	54410	CJU100675	30288	66472	PAE203301	42349	78533	YPS003544
18227	54411	CJU100684	30289	66473	PAE203302	42350	78534	YPS003545
18228	54412	CJU100698	30290	66474	PAE203303	42351	78535	YPS003546
18229	54413	CJU100702	30291	66475	PAE203331	42352	78536	YPS003547
18230	54414	CJU100704	30292	66476	PAE203342	42353	78537	YPS003552
18231	54415	CJU100705	30293	66477	PAE203357	42354	78538	YPS003553
18232	54416	CJU100709	30294	66478	PAE203386	42355	78539	YPS003556
18233	54417	CJU100710	30295	66479	PAE203414	42356	78540	YPS003559
18234	54418	CJU100711	30296	66480	PAE203415	42357	78541	YPS003562
18235	54419	CJU100712	30297	66481	PAE203450	42358	78542	YPS003580
18236	54420	CJU100714	30298	66482	PAE203457	42359	78543	YPS003605
18237	54421	CJU100728	30299	66483	PAE203459	42360	78544	YPS003633
18238	54422	CJU100729	30300	66484	PAE203468	42361	78545	YPS003640
18239	54423	CJU100732	30301	66485	PAE203480	42362	78546	YPS003644
18240	54424	CJU100734	30302	66486	PAE203501	42363	78547	YPS003651
18241	54425	CJU100735	30303	66487	PAE203514	42364	78548	YPS003677
18242	54426	CJU100737	30304	66488	PAE203515	42365	78549	YPS003683
18243	54427	CJU100740	30305	66489	PAE203525	42366	78550	YPS003696
18244	54428	CJU100741	30306	66490	PAE203552	42367	78551	YPS003702
18245	54429	CJU100742	30307	66491	PAE203556	42368	78552	YPS003731
18246	54430	CJU100744	30308	66492	PAE203557	42369	78553	YPS003739
18247	54431	CJU100749	30309	66493	PAE203558	42370	78554	YPS003752
18248	54432	CJU100751	30310	66494	PAE203560	42371	78555	YPS003775
18249	54433	CJU100756	30311	66495	PAE203565	42372	78556	YPS003777
18250	54434	CJU100760	30312	66496	PAE203579	42373	78557	YPS003792
18251	54435	CJU100763	30313	66497	PAE203580	42374	78558	YPS003815
18252	54436	CJU100766	30314	66498	PAE203588	42375	78559	YPS003822
18253	54437	CJU100774	30315	66499	PAE203595	42376	78560	YPS003891
18254	54438	CJU100775	30316	66500	PAE203599	42377	78561	YPS003904
18255	54439	CJU100777	30317	66501	PAE203600	42378	78562	YPS003930

DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID	DNA SeqID	Protein SeqID	Gene LocusID
18256	54440	CJU100788	30318	66502	PAE203601	42379	78563	YPS003983
18257	54441	CJU100795	30319	66503	PAE203612	42380	78564	YPS004039
18258	54442	CJU100797	30320	66504	PAE203614	42381	78565	YPS004144
18259	54443	CJU100799	30321	66505	PAE203615	42382	78566	YPS004146
18260	54444	CJU100801	30322	66506	PAE203618	42383	78567	YPS004171
18261	54445	CJU100802	30323	66507	PAE203625	42384	78568	YPS004196
18262	54446	CJU100805	30324	66508	PAE203626	42385	78569	YPS004197
18263	54447	CJU100815	30325	66509	PAE203631	42386	78570	YPS004214
18264	54448	CJU100816	30326	66510	PAE203633	42387	78571	YPS004281
18265	54449	CJU100817	30327	66511	PAE203634	42388	78572	YPS004286
18266	54450	CJU100819	30328	66512	PAE203635	42389	78573	YPS004652
18267	54451	CJU100824	30329	66513	PAE203637	42390	78574	YPS005092
18268	54452	CJU100827	30330	66514	PAE203638	42391	78575	YPS005095
18269	54453	CJU100828	30331	66515	PAE203640	42392	78576	YPS005126
18270	54454	CJU100833	30332	66516	PAE203643	42393	78577	YPS005201
18271	54455	CJU100835	30333	66517	PAE203644	42394	78578	YPS005574
18272	54456	CJU100836	30334	66518	PAE203650	42395	78579	YPS005860
18273	54457	CJU100842	30335	66519	PAE203651	42396	78580	YPS006083
18274	54458	CJU100843	30336	66520	PAE203652	42397	78581	YPS006344
18275	54459	CJU100845						

It will be appreciated that ORFs may also be identified using databases other than PathoSeq. For example, the ORFs may be identified using the methods described in U.S. Provisional Patent Application Serial Number 60/191,078, filed March 21, 2000.

EXAMPLE 4

Transfer of Exogenous Nucleic Acid Sequences to other Bacterial Species

The ability of an antisense molecule identified in a first organism to inhibit the proliferation of a second organism (thereby confirming that a gene in the second organism which is homologous to the gene from the first organism is required for proliferation of the second organism) was validated using antisense nucleic acids which inhibit the growth of *E. coli* which were identified using methods similar to those described above. Expression vectors which inhibited growth of *E. coli* upon induction of antisense RNA expression with IPTG were transformed directly into *Enterobacter cloacae, Klebsiella pneumonia* or *Salmonella typhimurium.* The transformed cells were then assayed for growth inhibition according to the method of Example 1. After growth in liquid culture, cells were plated at various serial dilutions and a score determined by calculating the log difference in growth for INDUCED vs. UNINDUCED antisense RNA expression as determined by the maximum 10 fold dilution at which a colony was observed. The results of these experiments are listed below in Table II. If there was no effect of antisense RNA expression in a microorganism, the clone is minus in Table II. In contrast, a positive in Table II means that at least 10 fold more cells were required to observe a colony on the induced plate than on the non-induced plate under the conditions used and in that microorganism.

TABLE II

Sensitivity of Other Microorganisms to Antisense Nucleic Acids That Inhibit Proliferation in *E. coli*

Mol. No.	*S. typhimurium*	*E. cloacae*	*K. pneumoniae*
EcXA001	+	+	-
EcXA004	+	-	-
EcXA005	+	+	+
EcXA006	-	-	-
EcXA007	-	+	-
EcXA008	+	-	+
EcXA009	-	-	-
EcXA010	+	+	+
EcXA011	-	+	-
EcXA012	-	+	-
EcXA013	+	+	+
EcXA014	+	+	-
EcXA015	+	+	+
EcXA016	+	+	+
EcXA017	+	+	+
EcXA018	+	+	+
EcXA019	+	+	+
EcXA020	+	+	+
EcXA021	+	+	+
EcXA023	+	+	+
EcXA024	+	-	+

EcXA025	-	-	-
EcXA026	+	+	-
EcXA027	+	+	-
EcXA028	+	-	-
EcXA029	-	-	-
EcXA030	+	+	+
EcXA031	+	-	-
EcXA032	+	+	-
EcXA033	+	+	+
EcXA034	+	+	+
EcXA035	-	-	-
EcXA036	+	-	+
EcXA037	+	+	-
EcXA038	+	+	+
EcXA039	+	-	-
EcXA041	+	+	+
EcXA042	-	+	+
EcXA043	-	-	-
EcXA044	-	-	-
EcXA045	+	+	+
EcXA046	-	-	-
EcXA047	+	+	-
EcXA048	-	-	-
EcXA049	+	-	-
EcXA050	-	-	-
EcXA051	+	-	-
EcXA052	+	-	-
EcXA053	+	+	+
EcXA054	-	-	+
EcXA055	+	-	-
EcXA056	+	-	+
EcXA057	+	+	-
EcXA058	-	-	-
EcXA059	+	+	+
EcXA060	-	-	-
EcXA061	-	-	-
EcXA062	-	-	-
EcXA063	+	+	-
EcXA064	-	-	-
EcXA065	+	+	-
EcXA066	-	-	-
EcXA067	-	+	-
EcXA068	-	-	-
EcXA069	-	+	-
EcXA070	-	-	-
EcXA071	+	-	-
EcXA072	+	-	+
EcXA073	+	+	+
EcXA074	+	+	+
EcXA075	+	-	-
EcXA076	-	+	-

EcXA077	+	+	-
EcXA079	+	+	+
EcXA080	+	-	-
EcXA082	-	+	-
EcXA083	-	-	-
EcXA084	-	+	-
EcXA086	-	-	-
EcXA087	-	-	-
EcXA088	-	-	-
EcXA089	-	-	-
EcXA090	-	-	-
EcXA091	-	-	-
EcXA092	-	-	-
EcXA093	-	-	-
EcXA094	+	+	+
EcXA095	+	+	-
EcXA096	-	-	-
EcXA097	+	-	-
EcXA098	+	-	-
EcXA099	-	-	-
EcXA100	-	-	-
EcXA101	-	-	-
EcXA102	-	-	-
EcXA103	-	+	-
EcXA104	+	+	+
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EcXA126	-	-	-
EcXA127	+	+	-
EcXA128	-	-	-
EcXA129	-	+	-
EcXA130	+	+	-
EcXA132	-	-	-

EcXA133	-	-	-
EcXA136	-	-	-
EcXA137	-	-	-
EcXA138	+	-	-
EcXA139	-	-	-
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EcXA148	-	-	-
EcXA149	+	+	+
EcXA150	-	-	-
EcXA151	+	-	-
EcXA152	-	-	-
EcXA153	+	+	-
EcXA154	-	-	-
EcXA155	-	-	ND
EcXA156	-	+	-
EcXA157	-	-	-
EcXA158	-	-	-
EcXA159	+	-	-
EcXA160	+	-	-
EcXA162	-	-	-
EcXA163	-	-	-
EcXA164	-	-	-
EcXA165	-	-	-
EcXA166	-	-	-
EcXA167	-	-	-
EcXA168	-	-	-
EcXA169	-	+	-
EcXA171	-	-	-
EcXA172	-	-	-
EcXA173	-	-	-
EcXA174	-	-	-
EcXA175	-	-	-
EcXA176	-	-	-
EcXA178	-	-	-
EcXA179	-	-	-
EcXA180	+	-	-
EcXA181	-	-	-
EcXA182	-	-	-
EcXA183	-	-	-
EcXA184	-	-	-
EcXA185	-	-	-
EcXA186	-	-	-
EcXA187	+	+	+
EcXA189	+	-	-

EcXA190	+	+	+
EcXA191	+	+	-
EcXA192	-	+	-

Thus, the ability of an antisense nucleic acid which inhibits the proliferation of *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis* to inhibit the growth of other organims may be evaluated by transforming the antisense nucleic acid directly into species other than the organism from which they were obtained. In particular, the ability of the antisense nucleic acid to inhibit the growth of *Acinetobacter baumannii, Anaplasma marginale, Aspergillus fumigatus, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Candida albicans, Candida glabrata* (also called *Torulopsis glabrata*), *Candida tropicalis, Candida parapsilosis, Candida guilliermondii, Candida krusei, Candida kefyr* (also called *Candida pseudotropicalis*), *Candida dubliniensis, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Clostridium perfringens, Coccidioides immitis, Corynebacterium diptheriae, Cryptococcus neoformans, Enterobacter cloacae, Enterococcus faecalis, Enterococcus faecium, Escherichia coli, Haemophilus influenzae, Helicobacter pylori, Histoplasma capsulatum, Klebsiella pneumoniae, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Nocardia asteroides, Pasteurella haemolytica, Pasteurella multocida, Pneumocystis carinii, Proteus mirabilis, Proteus vulgaris, Pseudomonas aeruginosa, Pseudomonas putida, Pseudomonas syringae, Salmonella bongori, Salmonella cholerasuis, Salmonella enterica, Salmonella paratyphi, Salmonella typhi, Salmonella typhimurium, Shigella boydii, Shigella dysenteriae, Shigella flexneri, Shigella sonnei, Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus pneumoniae, Streptococcus mutans, Streptococcus pyogenes, Treponema pallidum, Ureaplasma*

urealyticum, Vibrio cholerae, Vibrio parahaemolyticus, Vibrio vulnificans, Yersinia enterocolitica, Yersinia pestis or any species falling within the genera of any of the above species may be evaluated. In some embodiments of the present invention, the ability of the antisense nucleic acid to inhibit the growth of an organism other than *E. coli* may be evaluated. In such embodiments, the antisense nucleic acids are inserted into expression vectors functional in the organisms in which the antisense nucleic acids are evaluated.

It will be appreciated that the above methods for evaluating the ability of an antisense nucleic acid to inhibit the proliferation of a heterologous organism may be performed using antisense nucleic acids complementary to any of the proliferation-required nucleic acids from *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis* (including antisense nucleic acids complementary to SEQ ID NOs.: 6214-42397, such as the antisense nucleic acids of SEQ ID NOs.: 1-6213) or portions thereof, antisense nucleic acids complementary to homologous coding nucleic acids or portions thereof, or homologous antisense nucleic acids.

Those skilled in the art will appreciate that a negative result in a heterologous cell or microorganism does not mean that that cell or microorganism is missing that gene nor does it mean that the gene is unessential. However, a positive result means that the heterologous cell or microorganism contains a homologous gene which is required for proliferation of that cell or microorganism. The homologous gene may be obtained using the methods described herein. For example, the homologous gene may be isolated by performing a PCR procedure using primers based on the antisense sequence which reduced the level or activity of the gene product encoded by the homologous gene or by performing a Southern blot. Those cells that are inhibited by antisense may be used in cell-based assays as described herein for the identification and characterization of compounds in order to develop antibiotics effective in these cells or microorganisms. Those skilled in the art will appreciate that an antisense molecule which works in the microorganism from which it was obtained will not always work in a heterologous cell or microorganism.

EXAMPLE 5

Transfer of Exogenous Nucleic Acid Sequences to Other Bacterial Species Using the *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis* Expression Vectors or Expression Vectors Functional in Bacterial Species Other Than the Foregoing Bacterial Species

The antisense nucleic acids that inhibit the growth of *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio* cholerae or Yersinia *pestis*, or portions thereof, may also be evaluated for their ability to inhibit the growth of cells or microorganisms other than *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium,*

Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae or *Yersinia pestis*. For example, the antisense nucleic acids that inhibit the growth of *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis* may be evaluated for their ability to inhibit the growth of other organisms. In particular, the ability of the antisense nucleic acid to inhibit the growth of *Acinetobacter baumannii, Anaplasma marginale, Aspergillus fumigatus, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Candida albicans, Candida glabrata* (also called *Torulopsis glabrata*), *Candida tropicalis, Candida parapsilosis, Candida guilliermondii, Candida krusei, Candida kefyr* (also called *Candida pseudotropicalis*), *Candida dubliniensis, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Clostridium perfringens, Coccidioides immitis, Corynebacterium diptheriae, Cryptococcus neoformans, Enterobacter cloacae, Enterococcus faecalis, Enterococcus faecium, Escherichia coli, Haemophilus influenzae, Helicobacter pylori, Histoplasma capsulatum, Klebsiella pneumoniae, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Nocardia asteroides, Pasteurella haemolytica, Pasteurella multocida, Pneumocystis carinii, Proteus mirabilis, Proteus vulgaris, Pseudomonas aeruginosa, Pseudomonas putida, Pseudomonas syringae, Salmonella bongori, Salmonella cholerasuis, Salmonella enterica, Salmonella paratyphi, Salmonella typhi, Salmonella typhimurium, Shigella boydii, Shigella dysenteriae, Shigella flexneri, Shigella sonnei, Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus haemolyticus,*

Streptococcus pneumoniae, Streptococcus mutans, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae, Vibrio parahaemolyticus, Vibrio vulnificans, Yersinia enterocolitica, Yersinia pestis or any species falling within the genera of any of the above species may be evaluated. In some embodiments of the present invention, the ability of the antisense nucleic acid to inhibit the growth of an organism other than *E. coli* may be evaluated.

In such methods, expression vectors in which the expression of an antisense nucleic acid that inhibits the growth of *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio choleraei* or *Yersinia pestis*is under the control of an inducible promoter are introduced into the cells or microorganisms in which they are to be evaluated. In some embodiments, the antisense nucleic acids may be evaluated in cells or microorganisms which are closely related to *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis.* The ability of these antisense nucleic acids to inhibit the growth of the related cells or microorganisms in the presence of the inducer is then measured.

EXAMPLE 6

Identification of Nucleic Acids Homologous to Nucleic Acids Required for the Proliferation of *Staphylococcus aureus* in other Bacterial Species

Nucleic acids homologous to proliferation-required nucleic acids from *Staphylococcus aureus* were identified as follows. For example, thirty-nine antisense nucleic acids which inhibited the growth of *Staphylococcus aureus* were identified using methods such as those described herein and were inserted into an expression vector such that their expression was under the control of a xylose-inducible Xyl-T5 promoter. A vector with a reporter gene under control of the Xyl-T5 promoter was used to show that expression from the Xyl-T5 promoter in *Staphylococcus epidermidis* was comparable to that in *Staphylococcus aureus*.

The vectors were introduced into *Staphylococcus epidermidis* by electroporation as follows: *Staphylococcus epidermidis* was grown in liquid culture to mid-log phase and then harvested by centrifugation. The cell pellet was resuspended in 1/3 culture volume of ice-cold EP buffer (0.625 M sucrose, 1 mM $MgCl_2$, pH=4.0), and then harvested again by centrifugation. The cell pellet was then resuspended with 1/40 volume EP buffer and allowed to incubate on ice for 1 hour. The cells were then frozen for storage at -80°C. For electroporation, 50 µl of thawed electrocompetent cells were combined with 0.5 µg plasmid DNA and then subjected to an electrical pulse of 10 kV/cm, 25 uFarads, 200 ohm using a biorad gene pulser electroporation device. The cells were immediately resuspended with 200 µl outgrowth medium and incubated for 2 hours prior to plating on solid growth medium with drug selection to maintain the plasmid vector. Colonies resulting from overnight growth of these platings were selected, cultured in liquid medium with drug selection, and then subjected to dilution plating analysis as described for *Staphylococcus aureus* in Example 1 above to test growth sensitivity in the presence of the inducer xylose.

The results are shown in Table III below. The first column indicates the Molecule Number of the *Staphylococcus aureus* antisense nucleic acid which was introduced into *Staphylococcus epidermidis*. The second column indicates whether the antisense nucleic acid inhibited the growth of *Staphylococcus epidermidis*, with a "+" indicating that growth was inhibited. Of the 39 *Staphylococcus aureus* antisense nucleic acids evaluated, 20 inhibited the growth of *Staphylococcus epidermidis*.

TABLE III

Sensitivity of Other Microorganisms to Antisense Nucleic Acids That Inhibit Proliferation of *Staphylococcus aureus*

Mol. No.	*S. epidermidis*
SaXA005	+
SaXA007	+
SaXA008	+
SaXA009	+
SaXA010	+
SaXA011	-

SaXA012	-
SaXA013	-
SaXA015	+
SaXA017	-
SaXA022	+
SaXA023	-
SaXA024	-
SaXA025	+
SaXA026	+
SaXA027	-
SaXA027b	-
SaXA02c	-
SaXA028	-
SaXA029	+
SaXA030	+
SaXA032	+
SaXA033	+
SaXA034	-
SaXA035	+
SaXA037	+
SaXA039	-
SaXA042	-
SaXA043	-
SaXA044	-
SaXA045	+
SaXA051	+
SaXA053	-
SaXA056b	-
SaXA059a	+
SaXA060	-
SaXA061	+
SaXA062	+
SaXA063	-
SaXA065	-

Although the results shown above were obtained using a subset of proliferation-required nucleic acids from *Staphylococcus aureus*, it will be appreciated that similar analyses may be performed using the nucleic acids of the present invention to determine whether they inhibit the proliferation of cells or microorganisms other than *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis.*

Thus, it will be appreciated that the above methods for evaluating the ability of an antisense nucleic acid to inhibit the proliferation of a heterologous organism may be performed using antisense nucleic acids complementary to any of the proliferation-required nucleic acids from *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* or *Yersinia pestis,* (including antisense nucleic acids complementary to SEQ ID NOs.: 6214-42397, such as the antisense nucleic acids of SEQ ID NOs.: 1-6213) or portions thereof, antisense nucleic acids complementary to homologous coding nucleic acids or portions thereof, or homologous antisense nucleic acids.

EXAMPLE 7

Identification of Homologous Nucleic Acids by Functional Complementation

Homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified as follows. Gene products whose activities may be complemented by a proliferation-required gene product from *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae, Yersinia pestis* or homologous polypeptides are identified using merodiploids, created by introducing a plasmid or Bacterial Artificial Chromosome into an organism having a mutation in the essential gene which reduces or eliminates the activity of the gene product. In some embodiments, the mutation may be a conditional mutation, such as a temperature sensitive mutation, such that the organism proliferates under permissive conditions but is unable to proliferate under non-permissive conditions in the absence of complementation by the gene on the plasmid or Bacterial Artificial Chromosome. Alternatively, duplications may be constructed as described in Roth et al. (1987) Biosynthesis of Aromatic Amino Acids in *Escherichia coli* and *Salmonella typhimurium*, F. C. *Neidhardt,* ed., American Society for Microbiology, publisher, pp. 2269-2270. Such methods are familiar to those skilled in the art. Alternatively, homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified by placing a gene required for proliferation or a nucleic acid complementary to at least a portion of a gene required for proliferation under the control of a regulatable promoter as described above, introducing a plasmid or Bacterial Artificial Chromosome into the cell, and identifying cells which are able to proliferate under conditions which would prevent or reduce proliferation in the absence of the plasmid or Bacterial Artificial Chromosome.

Homologous coding nucleic acids, homologous antisense nucleic acids or nucleic acids encoding homologous polypeptides may be identified using databases as follows.

EXAMPLE 8

Identification of Homologous Nucleic Acids by Database Analysis

As a demonstration of the methodology required to find homologues to an essential gene, fifty-one prokaryotic organisms were analyzed and compared in detail. First, the most reliable source of gene sequences for each organism was assessed by conducting a survey of the public and private data sources. The fifty-one organisms studied are *Escherichia coli, Staphylococcus aureus, Enterococcus faecalis, Klebsiella pneumoniae, Pseudomonas aeruginosa, Salmonella typhimurium, Acinetobacter baumannii, Bacillus anthracis, Bacteroides fragilis, Bordetella pertussis, Borrelia burgdorferi, Burkholderia cepacia, Burkholderia fungorum, Burkholderia mallei, Campylobacter jejuni, Chlamydia pneumoniae, Chlamydia trachomatis, Clostridium acetobutylicum, Clostridium botulinum, Clostridium difficile, Corynebacterium diptheriae, Enterobacter cloacae, Enterococcus faecium, Haemophilus influenzae, Helicobacter pylori, Legionella pneumophila, Listeria monocytogenes, Moraxella catarrhalis, Mycobacterium avium, Mycobacterium bovis, Mycobacterium leprae, Mycobacterium tuberculosis, Mycoplasma genitalium, Mycoplasma pneumoniae, Neisseria gonorrhoeae, Neisseria meningitidis, Pasteurella multocida, Proteus mirabilis, Pseudomonas putida, Pseudomonas syringae, Salmonella paratyphi, Salmonella typhi, Staphylococcus epidermidis, Staphylococcus haemolyticus, Streptococcus mutans, Streptococcus pneumoniae, Streptococcus pyogenes, Treponema pallidum, Ureaplasma urealyticum, Vibrio cholerae* and *Yersinia pestis.* Full-length gene protein and nucleotide sequences for these organisms were assembled from various sources. For *Escherichia coli, Haemophilus influenzae* and *Helicobacter pylori,* gene sequences were adopted from the public sequencing projects, and derived from the GenPept 115 database (available from NCBI). For *Pseudomonas aeruginosa,* gene sequences were adopted from the Pseudomonas genome sequencing project (downloaded from http://www.pseudomonas.com). For *Klebsiella pneumoniae, Staphylococcus aureus, Streptococcus pneumoniae* and *Salmonella typhi,* genomic sequences from PathoSeq v 4.1 (Mar 2000 release) were reanalyzed for ORFs using the gene finding software GeneMark v 2.4a, which was purchased from GenePro Inc. 451 Bishop St., N.W., Suite B, Atlanta, GA, 30318, USA. Similar analyses were conducted for the other organisms using publically available and proprietary databases.

Homologous coding nucleic acids and the homologous polypeptides which they encode may be identified using a "reciprocal" best-hit analysis. To facilitate the identification of homologous coding nucleic acids and homologous polypeptides, paralogous genes within each of 51 organisms were identified and clustered prior to comparison to other organisms. Briefly, the polypeptide sequence of each polypeptide encoded by each open reading frame (ORF) in a given organism was compared to the polypeptide sequence encoded by every other ORF for that organism for each of the 51 pathogenic organisms (PathoSeq Sept 2001 release) using BLASTP 2.09 algorithm without filtering. Simultaneously, the polypeptide sequence encoded by each ORF of an organism was compared to the polypeptide sequences encoded by each of the ORFs in the remaining 51 organisms. Those polypeptides within a single organism that shared a higher degree

of sequence identity to one another than to polypeptide sequences obtained from any other organisms were clustered as "paralog" sequences for "reciprocal" best-hit analysis.

For each reference organism, the 50 homologous coding nucleic acids (and the 50 homologous polypeptides which they encode) was determined by identifying the ORFs in each of the 50 comparison organisms which encode a polypeptide sharing the highest degree of amino acid sequence identity to the polypeptide encoded by the ORF from the reference organism. The accuracy of the identification of the predicted homologous coding nucleic acids (and the homologous polypeptides which they encode) was confirmed by a "reciprocal" BLAST analysis in which the polypeptide sequence of the predicted homologous polypeptide was compared against the polypeptides encoded by each of the ORFS in the reference organism using BLASTP 2.09 algorithm without filtering. Only those polypeptides that share the highest degree of amino acid sequence identity in each portion of the two-way comparison are retained for further analysis.

The best homolog for each of the fifty-one organisms, defined as the most significantly scoring match which also fulfilled the above criteria, was reported in Table IV.

Table IV lists the best ORF identified as described above (column labeled Homolog LocusID) that matches the query sequence (column labeled Query LocusID), % identity between the query sequence and the homolog, and the amount of each sequence that aligns together well (columns labeled Query Coverage and Homolog Coverage) for the gene identified in each of the fifty-one organisms evaluated as described above. As described in connection which Table IC, the Locus IDs (ie. both Query Locus ID and Homolog Locus ID) provided in Table IV each comprise a nine digit alpha-numeric identifier that can be used to determine the organism from which the query and homolog sequences were obtained. Specifically, the first letter of the Locus ID corresponds to the first letter of the genus name of the organism described herein from which the Locus was identified and the second and third letters of the Locus ID correspond to the first two letters of the species name of this organism. For example, the identifier EFA205257 describes a gene locus identified from *Enterococcus faecalis*. In those instances where the three letter identifier is the same for different organisms, the exact identity of the organism which corresponds to the Locus ID can be determined by referring to the organism designation in the sequence listing for the coding nucleic acid or polypeptide SEQ ID NO. that corresponds to the particular Locus ID.

TABLE IV

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100001	ECO100001	100%	100%	100%
ECO100001	STY104800	85%	100%	100%
ECO100001	STM104529	85%	100%	100%
ECO100002	ABA101891	29%	40.9%	80.3%
ECO100002	BAN108126	29%	55.5%	98.5%
ECO100002	BAN105795	30%	55.5%	95.8%
ECO100002	BFR11028	36%	98.9%	99.4%
ECO100002	BPT101425	30%	41.5%	81.7%
ECO100002	BCE111633	28%	42.2%	73.4%
ECO100002	BMA100957	30%	41.3%	82.5%
ECO100002	CJU100543	30%	55.5%	97.8%
ECO100002	CDF100035	25%	5.4%	74.4%
ECO100002	CDF100673	25%	54.9%	96.7%
ECO100002	CDP101634	28%	46.1%	95.7%
ECO100002	EBC103170	92%	70.7%	100%
ECO100002	EFA201386	27%	56.2%	99.8%
ECO100002	ECO100002	100%	100%	100%
ECO100002	HIN100088	62%	99.3%	99.8%
ECO100002	HPY101212	32%	41.8%	83.5%
ECO100002	KPN300246	90%	4.1%	76.7%
ECO100002	KPN302085	92%	100%	100%
ECO100002	LMO102676	27%	57.3%	100%
ECO100002	MCA100888	30%	40.9%	80.3%
ECO100002	MAV103162	26%	55.5%	94.8%
ECO100002	MBV103584	28%	41.0%	79.6%
ECO100002	MLP101383	25%	55.5%	94.8%
ECO100002	MTU203655	28%	41.0%	79.6%
ECO100002	NGO100216	30%	8.9%	4.2%
ECO100002	NME201560	30%	8.9%	4.2%
ECO100002	PMU100113	64%	99.3%	99.8%
ECO100002	PRT104264	76%	100%	100%
ECO100002	PAE200903	30%	4.5%	5.6%
ECO100002	PPU106924	31%	40.9%	80.3%
ECO100002	PSY103112	30%	31.7%	82.0%
ECO100002	SPA100167	93%	39.5%	100%
ECO100002	STY100365	94%	100%	100%
ECO100002	STM100038	94%	100%	100%
ECO100002	SAU801327	26%	56.2%	97.6%
ECO100002	SEP201977	26%	56.2%	98.0%
ECO100002	SHA100755	26%	56.2%	99.8%
ECO100002	SMU100555	25%	56.6%	100%
ECO100002	SPN400374	25%	56.1%	98.7%
ECO100002	VCH102329	62%	100%	99.3%
ECO100002	YPS000769	81%	100%	100%
ECO100004	BFR11030	47%	85.3%	93.3%
ECO100004	BPT101337	32%	99.8%	99.4%
ECO100004	BCE114764	28%	97.4%	96.9%
ECO100004	BFU101149	29%	94.9%	94.6%
ECO100004	BMA105857	30%	90.4%	95.0%
ECO100004	CJU100751	29%	90.2%	87.2%
ECO100004	CAC103481	28%	99.5%	95.8%
ECO100004	CBO101914	30%	79.9%	86.5%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100004	CDF101928	31%	87.9%	85.6%
ECO100004	CDP100440	27%	99.3%	97.9%
ECO100004	EBC102668	92%	80.1%	100%
ECO100004	ECO100004	100%	100%	100%
ECO100004	HIN100086	66%	99.3%	99.5%
ECO100004	HPY100096	28%	89.3%	86.0%
ECO100004	KPN302095	90%	99.3%	99.8%
ECO100004	LPN102575	35%	89.7%	89.8%
ECO100004	MCA103682	29%	99.1%	98.5%
ECO100004	NGO101188	28%	99.1%	98.9%
ECO100004	NME201311	29%	99.1%	98.9%
ECO100004	PMU100115	69%	99.3%	99.8%
ECO100004	PRT104738	78%	99.3%	98.8%
ECO100004	PAE203732	33%	99.8%	98.5%
ECO100004	PPU107824	35%	93.9%	93.2%
ECO100004	PSY103804	34%	99.8%	98.5%
ECO100004	SPA100998	88%	57.0%	100%
ECO100004	STY100371	93%	100%	100%
ECO100004	STM100044	93%	100%	100%
ECO100004	SMU101311	31%	90.0%	87.2%
ECO100004	SPN401875	32%	90.2%	87.7%
ECO100004	VCH102327	68%	99.5%	99.5%
ECO100004	YPS000771	83%	99.3%	99.1%
ECO100005	BCE106023	30%	67.3%	35.5%
ECO100005	BFU106225	33%	74.5%	90.3%
ECO100005	BMA105475	31%	61.2%	52.5%
ECO100005	EBC102669	57%	99.0%	100%
ECO100005	ECO100005	100%	100%	100%
ECO100005	MAV107742	38%	53.1%	50.6%
ECO100005	PAE109842	33%	55.1%	23.9%
ECO100008	BPT101198	53%	98.7%	98.1%
ECO100008	BCE112831	56%	99.7%	90.3%
ECO100008	BFU112516	57%	99.7%	99.7%
ECO100008	BMA101518	57%	98.7%	98.7%
ECO100008	CJU100252	27%	55.2%	49.8%
ECO100008	EBC102672	94%	100%	100%
ECO100008	ECO100008	100%	100%	100%
ECO100008	HIN101098	79%	98.7%	98.7%
ECO100008	HPY101474	28%	58.4%	57.9%
ECO100008	KPN302087	91%	100%	100%
ECO100008	NME201973	31%	47.0%	41.9%
ECO100008	PMU101639	74%	97.8%	98.1%
ECO100008	PMU101602	77%	98.7%	98.7%
ECO100008	PRT104596	86%	100%	100%
ECO100008	PAE202794	60%	97.8%	97.7%
ECO100008	PPU101750	60%	99.4%	99.4%
ECO100008	PSY102944	60%	98.7%	98.4%
ECO100008	SPA100585	92%	62.1%	100%
ECO100008	STY100380	94%	100%	100%
ECO100008	STM100053	94%	100%	100%
ECO100008	SAU504318	30%	30.6%	17.8%
ECO100008	VCH103346	75%	98.7%	98.7%
ECO100008	YPS000773	88%	100%	100%
ECO100009	BPT100950	69%	96.4%	88.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100009	BCE102933	73%	96.4%	95.0%
ECO100009	BFU100752	72%	95.4%	88.1%
ECO100009	BMA109380	72%	96.4%	93.2%
ECO100009	CJU100675	50%	95.9%	97.2%
ECO100009	CAC100345	41%	79.5%	90.3%
ECO100009	CBO103886	42%	79.5%	92.0%
ECO100009	CDF101203	35%	78.5%	88.6%
ECO100009	EBC102673	90%	98.5%	98.5%
ECO100009	EFA202344	45%	71.3%	83.8%
ECO100009	ECO100009	100%	100%	100%
ECO100009	HIN100319	79%	96.9%	95.9%
ECO100009	HPY100786	48%	95.9%	99.4%
ECO100009	KPN302084	91%	98.5%	98.5%
ECO100009	MAV104045	37%	75.9%	91.9%
ECO100009	MBV100298	33%	75.9%	90%
ECO100009	MTU200856	33%	75.9%	90%
ECO100009	PMU102003	78%	96.4%	97.9%
ECO100009	PRT105678	82%	99.5%	99.5%
ECO100009	SPA100586	93%	98.5%	98.0%
ECO100009	STY100383	93%	98.5%	98.0%
ECO100009	STM100056	91%	98.5%	98.0%
ECO100009	YPS000774	87%	100%	100%
ECO100013	ECO100013	100%	100%	100%
ECO100013	KPN302079	66%	98.5%	100%
ECO100013	SPA105546	80%	100%	100%
ECO100013	STY106203	82%	100%	100%
ECO100023	ABA106150	60%	92.0%	67.2%
ECO100023	BAN103797	50%	96.6%	95.5%
ECO100023	BFR105539	39%	100%	100%
ECO100023	BPT101291	51%	100%	100%
ECO100023	BBU100232	38%	92.0%	74.8%
ECO100023	BCE112030	47%	98.9%	95.6%
ECO100023	BFU100359	51%	98.9%	93.5%
ECO100023	BMA106459	48%	98.9%	93.5%
ECO100023	CJU101517	34%	100%	100%
ECO100023	CPN201099	31%	94.3%	82.8%
ECO100023	CTR200896	33%	88.5%	75.5%
ECO100023	CAC102146	45%	98.9%	97.7%
ECO100023	CBO100245	39%	98.9%	97.7%
ECO100023	CDF101197	41%	96.6%	81.6%
ECO100023	CDP101196	47%	100%	100%
ECO100023	EBC101439	96%	70.1%	100%
ECO100023	EFA200336	48%	92.0%	95.2%
ECO100023	EFM201993	34%	97.7%	100%
ECO100023	ECO100023	100%	100%	100%
ECO100023	HIN100944	72%	100%	97.8%
ECO100023	HPY100074	33%	100%	97.8%
ECO100023	KPN205579	98%	100%	100%
ECO100023	LMO100322	46%	97.7%	100%
ECO100023	MCA100794	56%	98.9%	97.7%
ECO100023	MAV103835	43%	98.9%	100%
ECO100023	MBV104427	41%	98.9%	97.7%
ECO100023	MLP100381	41%	98.9%	100%
ECO100023	MTU202376	43%	98.9%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100023	MGE100374	30%	97.7%	88.6%
ECO100023	MPN100301	31%	97.7%	89.7%
ECO100023	NGO101642	57%	100%	100%
ECO100023	NME201868	57%	100%	100%
ECO100023	PMU101659	78%	100%	97.8%
ECO100023	PRT102018	83%	98.9%	100%
ECO100023	PAE204561	59%	100%	95.6%
ECO100023	PPU108230	59%	98.9%	93.5%
ECO100023	PSY102689	58%	100%	94.6%
ECO100023	SPA101944	97%	100%	100%
ECO100023	STY101095	97%	100%	100%
ECO100023	SAU801586	40%	90.8%	94.0%
ECO100023	SEP203256	37%	90.8%	90.7%
ECO100023	SHA102295	39%	90.8%	94.0%
ECO100023	SMU102606	41%	97.7%	92.9%
ECO100023	SPN400740	43%	97.7%	94.0%
ECO100023	SPY200946	45%	95.4%	98.7%
ECO100023	UUR100312	40%	88.5%	83.3%
ECO100023	VCH100666	70%	98.9%	100%
ECO100023	YPS003605	87%	98.9%	98.9%
ECO100025	ABA101842	41%	97.8%	97.3%
ECO100025	BAN106284	28%	98.1%	99.4%
ECO100025	BAN101499	35%	99.4%	97.2%
ECO100025	BFR100412	36%	98.4%	98.1%
ECO100025	BPT100434	47%	93.3%	93.1%
ECO100025	BCE109423	47%	98.1%	89.0%
ECO100025	BFU101232	45%	98.1%	92.7%
ECO100025	BMA109546	46%	98.1%	89.0%
ECO100025	CJU100550	26%	91.4%	91.9%
ECO100025	CPN200431	31%	92.0%	90.9%
ECO100025	CTR200362	32%	91.1%	93.9%
ECO100025	CAC102490	31%	89.8%	92.4%
ECO100025	CBO102062	31%	86.3%	97.8%
ECO100025	CDF100874	34%	95.5%	94.8%
ECO100025	CDP100453	30%	94.9%	90.1%
ECO100025	EBC100241	84%	56.9%	98.9%
ECO100025	EFA200587	31%	94.9%	94.3%
ECO100025	EFM201219	33%	97.1%	97.4%
ECO100025	ECO100025	100%	100%	100%
ECO100025	HIN100942	53%	98.1%	98.1%
ECO100025	HPY101070	30%	91.4%	93.6%
ECO100025	KPN300577	86%	91.1%	100%
ECO100025	LPN101116	45%	97.8%	92.7%
ECO100025	LMO100570	34%	92.3%	92.0%
ECO100025	MCA100302	41%	93.3%	93.8%
ECO100025	MAV100301	35%	92.0%	93.5%
ECO100025	MBV101247	35%	91.7%	98.4%
ECO100025	MLP100513	36%	91.7%	91.2%
ECO100025	MTU202748	35%	92.0%	91.5%
ECO100025	MGE100147	28%	89.5%	92.9%
ECO100025	MPN100673	27%	92.0%	96.7%
ECO100025	NGO101768	47%	97.1%	95.3%
ECO100025	NME200577	47%	97.1%	95.6%
ECO100025	PMU101661	58%	98.1%	98.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100025	PRT105259	67%	97.8%	97.8%
ECO100025	PAE204559	55%	98.1%	98.1%
ECO100025	PPU105777	52%	97.1%	95.9%
ECO100025	PSY102686	52%	97.1%	99.7%
ECO100025	SPA101946	88%	98.7%	100%
ECO100025	STY101100	89%	98.7%	98.7%
ECO100025	STM100815	89%	98.7%	98.7%
ECO100025	SAU801272	34%	97.1%	95.4%
ECO100025	SEP201565	35%	98.7%	96.9%
ECO100025	SHA100170	35%	97.1%	95.4%
ECO100025	SMU100956	36%	91.4%	92.5%
ECO100025	SPN401017	33%	92.0%	93.4%
ECO100025	SPY200960	32%	96.8%	96.1%
ECO100025	TPA100878	30%	69.6%	80%
ECO100025	UUR100357	26%	87.2%	86.9%
ECO100025	VCH100668	58%	97.1%	94.1%
ECO100025	YPS000809	75%	99.7%	99.7%
ECO100026	ABA103852	54%	99.8%	100%
ECO100026	BAN106248	37%	92.3%	96.1%
ECO100026	BAN106209	43%	86.5%	99.1%
ECO100026	BFR10500	25%	81.1%	79.2%
ECO100026	BPT100432	51%	99.5%	99.6%
ECO100026	BBU100832	26%	81.8%	74.0%
ECO100026	BCE111670	51%	95.3%	97.0%
ECO100026	BFU101230	51%	99.3%	98.4%
ECO100026	BMA102496	43%	98.5%	94.9%
ECO100026	BMA109115	50%	99.6%	98.7%
ECO100026	CJU100989	40%	96.3%	97.4%
ECO100026	CPN200653	26%	81.7%	73.5%
ECO100026	CTR200283	27%	81.0%	73.4%
ECO100026	CAC102765	27%	90.5%	81.7%
ECO100026	CBO100873	30%	55.1%	96.8%
ECO100026	CDF104554	29%	80.0%	72.4%
ECO100026	CDP101247	28%	89.1%	80.5%
ECO100026	EBC102151	92%	98.2%	100%
ECO100026	EFA202160	44%	98.1%	97.8%
ECO100026	EFM201425	44%	98.5%	98.1%
ECO100026	ECO100026	100%	100%	100%
ECO100026	HPY101401	39%	98.5%	99.2%
ECO100026	KPN300290	95%	4.7%	100%
ECO100026	KPN306610	92%	98.3%	100%
ECO100026	LPN101832	55%	99.9%	99.9%
ECO100026	LMO101679	43%	98.7%	99.2%
ECO100026	MCA103671	52%	0.9%	16.5%
ECO100026	MAV103388	27%	83.7%	74.6%
ECO100026	MBV102555	28%	82.3%	75.3%
ECO100026	MLP100743	24%	89.0%	80.8%
ECO100026	MTU201515	28%	82.3%	75.3%
ECO100026	MGE100354	32%	98.3%	99.4%
ECO100026	MPN100322	33%	89.3%	95.7%
ECO100026	NGO101799	53%	99.7%	100%
ECO100026	NME200578	53%	100%	100%
ECO100026	PMU101662	69%	99.8%	99.7%
ECO100026	PRT101657	80%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100026	PAE204558	57%	100%	100%
ECO100026	PPU109898	56%	100%	100%
ECO100026	PSY102684	54%	98.3%	100%
ECO100026	SPA100667	85%	82.8%	99.5%
ECO100026	STY101103	86%	100%	100%
ECO100026	STM100818	87%	100%	100%
ECO100026	SAU801193	42%	98.3%	99.0%
ECO100026	SEP200928	42%	98.3%	98.7%
ECO100026	SHA101034	41%	98.2%	99.5%
ECO100026	SMU100109	40%	98.5%	98.1%
ECO100026	SPN401501	41%	98.5%	98.1%
ECO100026	SPY201164	42%	95.8%	95.2%
ECO100026	TPA100448	26%	89.6%	81.1%
ECO100026	UUR100414	36%	97.0%	97.8%
ECO100026	VCH100669	67%	100%	100%
ECO100026	YPS000810	83%	100%	100%
ECO100032	BFR102496	39%	97.6%	100%
ECO100032	BCE114725	66%	97.1%	94.6%
ECO100032	BFU101987	64%	97.1%	90.0%
ECO100032	BMA105964	64%	97.1%	94.6%
ECO100032	CJU101410	40%	96.9%	99.5%
ECO100032	CAC100686	41%	96.3%	99.1%
ECO100032	CDF102200	42%	96.3%	98.8%
ECO100032	CDF101392	47%	97.1%	95.3%
ECO100032	CDP100339	45%	98.2%	94.4%
ECO100032	EBC100940	91%	51.8%	100%
ECO100032	EFA201091	45%	97.9%	98.6%
ECO100032	EFM201379	47%	96.9%	97.8%
ECO100032	ECO100032	100%	100%	100%
ECO100032	HPY101220	38%	97.1%	99.2%
ECO100032	KPN306459	80%	100%	100%
ECO100032	LPN100982	58%	97.6%	99.2%
ECO100032	LMO100114	46%	96.6%	96.1%
ECO100032	MCA101274	62%	96.6%	95.9%
ECO100032	MAV103355	43%	98.2%	99.2%
ECO100032	MBV100477	44%	57.6%	97.3%
ECO100032	MLP100326	42%	98.7%	100%
ECO100032	MTU201366	45%	97.6%	98.7%
ECO100032	NGO101672	67%	96.1%	96.6%
ECO100032	NME200564	67%	97.1%	97.6%
ECO100032	PMU101502	65%	97.1%	95.3%
ECO100032	PRT101652	81%	99.2%	97.9%
ECO100032	PAE204754	71%	99.0%	100%
ECO100032	PPU108522	70%	89.8%	100%
ECO100032	PSY107482	68%	64.4%	100%
ECO100032	SPA101379	86%	100%	100%
ECO100032	STY101157	93%	100%	100%
ECO100032	STM100872	94%	100%	100%
ECO100032	SAU801202	45%	97.6%	96.4%
ECO100032	SEP102450	43%	99.2%	98.1%
ECO100032	SHA102129	44%	99.2%	98.1%
ECO100032	SMU100787	43%	97.6%	97.2%
ECO100032	SPN401153	43%	98.2%	98.6%
ECO100032	SPY200619	43%	98.7%	98.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100032	VCH102355	82%	99.0%	99.7%
ECO100032	YPS000843	86%	99.7%	97.4%
ECO100033	ABA105447	76%	86.5%	51.8%
ECO100033	BAN106466	36%	92.5%	93.4%
ECO100033	BAN106013	50%	97.2%	73.8%
ECO100033	BFR11696	39%	96.3%	96.2%
ECO100033	BFR10760	40%	39.0%	91.4%
ECO100033	BPT101199	69%	97.1%	73.7%
ECO100033	BCE101906	68%	99.9%	99.9%
ECO100033	BFU114502	68%	99.9%	99.9%
ECO100033	BMA100194	68%	99.9%	99.9%
ECO100033	CJU100250	55%	100%	99.9%
ECO100033	CAC100380	46%	100%	100%
ECO100033	CDF103346	45%	68.9%	81.0%
ECO100033	CDF103290	48%	97.4%	97.7%
ECO100033	CDF102440	47%	97.4%	97.7%
ECO100033	CDP100338	52%	98.4%	98.2%
ECO100033	EBC103143	96%	4.1%	77.8%
ECO100033	EFA201093	49%	98.6%	99.4%
ECO100033	EFM200554	48%	98.6%	99.4%
ECO100033	ECO100033	100%	100%	100%
ECO100033	HPY100903	53%	99.4%	99.7%
ECO100033	KPN306727	95%	92.1%	92.8%
ECO100033	LPN103124	72%	90.9%	74.6%
ECO100033	LMO101147	50%	98.8%	98.5%
ECO100033	MCA101278	70%	99.7%	99.9%
ECO100033	MAV103356	51%	99.9%	99.4%
ECO100033	MBV100481	52%	99.9%	99.6%
ECO100033	MLP100327	51%	99.9%	98.3%
ECO100033	MTU301470	52%	99.9%	99.6%
ECO100033	NGO101630	69%	100%	99.7%
ECO100033	NME200558	69%	100%	99.7%
ECO100033	PMU101505	69%	99.9%	99.9%
ECO100033	PRT101651	90%	100%	99.8%
ECO100033	PAE204752	76%	100%	99.9%
ECO100033	PPU105037	74%	100%	99.6%
ECO100033	PSY104746	75%	100%	99.9%
ECO100033	SPA101378	93%	87.4%	63.3%
ECO100033	STY101163	98%	100%	99.8%
ECO100033	STM100875	98%	100%	99.8%
ECO100033	SAU801203	49%	99.5%	100%
ECO100033	SEP201467	52%	86.8%	35.4%
ECO100033	SHA102130	49%	99.5%	100%
ECO100033	SMU100789	50%	98.4%	99.2%
ECO100033	SPN401152	49%	98.4%	99.2%
ECO100033	SPY200620	49%	98.4%	99.2%
ECO100033	VCH102354	85%	100%	99.6%
ECO100033	YPS000846	92%	100%	99.6%
ECO100040	ECO100040	100%	100%	100%
ECO100040	MAV102307	26%	22.0%	44.2%
ECO100040	PRT105337	87%	100%	100%
ECO100040	SPA102043	92%	54.8%	100%
ECO100040	STY101185	96%	100%	99.8%
ECO100068	BPT100719	25%	79.8%	77.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100068	BCE110446	23%	97.2%	89.3%
ECO100068	BFU104253	25%	59.3%	49.6%
ECO100068	CJU100163	23%	81.0%	82.0%
ECO100068	EBC103044	90%	96.0%	97.5%
ECO100068	ECO100068	100%	100%	100%
ECO100068	HIN100998	50%	99.1%	99.7%
ECO100068	KPN303934	83%	100%	100%
ECO100068	MCA100722	24%	85.6%	85.2%
ECO100068	NGO101933	30%	97.9%	97.3%
ECO100068	NME200270	29%	97.9%	97.3%
ECO100068	PMU100376	49%	95.4%	94.3%
ECO100068	PRT100202	66%	93.9%	94.5%
ECO100068	PAE204684	26%	81.7%	79.7%
ECO100068	PSY105429	22%	88.4%	87.8%
ECO100068	SPA101253	89%	100%	100%
ECO100068	STY101259	91%	100%	100%
ECO100068	TPA100143	31%	91.4%	90.7%
ECO100068	VCH102502	65%	97.6%	97.0%
ECO100068	YPS000940	72%	98.8%	97.9%
ECO100069	BAN110716	37%	7.8%	66.2%
ECO100069	BAN110657	27%	12.0%	60.6%
ECO100069	BAN101932	26%	57.5%	56.3%
ECO100069	EBC103045	79%	100%	100%
ECO100069	ECO100069	100%	100%	100%
ECO100069	KPN303932	78%	100%	100%
ECO100069	LMO101504	24%	94.4%	91.4%
ECO100069	PRT103304	47%	54.3%	100%
ECO100069	SPA101254	81%	99.5%	100%
ECO100069	STY101261	86%	100%	100%
ECO100069	STM100598	38%	99.5%	99.7%
ECO100069	VCH103302	33%	99.5%	99.1%
ECO100069	YPS000941	62%	99.8%	99.8%
ECO100081	BFR12308	32%	53.9%	68.6%
ECO100081	BPT103032	44%	87.5%	90.8%
ECO100081	BCE103942	47%	82.9%	85.9%
ECO100081	BFU100820	48%	82.2%	85.2%
ECO100081	BMA105750	47%	82.2%	85.2%
ECO100081	CAC103463	29%	100%	100%
ECO100081	CBO101902	31%	91.4%	85.9%
ECO100081	CDP101285	34%	93.4%	95.8%
ECO100081	EBC101941	95%	78.9%	100%
ECO100081	EFA202186	34%	88.2%	92.3%
ECO100081	EFM202534	39%	82.2%	83.9%
ECO100081	ECO100081	100%	100%	100%
ECO100081	HIN101103	59%	100%	100%
ECO100081	KPN301855	93%	78.9%	100%
ECO100081	LPN102025	43%	100%	100%
ECO100081	LMO101121	36%	96.7%	96.5%
ECO100081	MAV103918	32%	94.1%	99.3%
ECO100081	MBV101485	31%	94.1%	99.3%
ECO100081	MLP100560	32%	94.1%	99.3%
ECO100081	MTU202132	31%	94.1%	99.3%
ECO100081	MGE100226	27%	98.0%	90.3%
ECO100081	MPN100522	28%	98.7%	99.3%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100081	NGO100621	40%	91.4%	93.4%
ECO100081	NME201917	40%	91.4%	93.4%
ECO100081	PMU100133	55%	100%	100%
ECO100081	PRT102634	77%	100%	100%
ECO100081	PAE204419	51%	100%	100%
ECO100081	PPU105962	50%	100%	100%
ECO100081	PSY103859	52%	100%	100%
ECO100081	SPA102750	93%	100%	100%
ECO100081	STY103147	93%	100%	100%
ECO100081	STM102859	94%	100%	100%
ECO100081	SAU801178	33%	98.0%	97.9%
ECO100081	SEP200891	32%	98.0%	97.9%
ECO100081	SHA101307	33%	98.0%	97.9%
ECO100081	TPA100379	34%	99.3%	96.6%
ECO100081	UUR100388	25%	96.7%	96.6%
ECO100081	YPS000986	84%	100%	100%
ECO100093	ABA100624	24%	88.0%	82.7%
ECO100093	BAN113055	20%	68.1%	70.9%
ECO100093	BAN105429	21%	68.1%	74.2%
ECO100093	BPT102987	28%	89.1%	94.5%
ECO100093	BCE102722	30%	75%	82%
ECO100093	BFU100406	28%	81.9%	88%
ECO100093	BMA104087	29%	75%	82%
ECO100093	CDP101255	29%	22.8%	31.2%
ECO100093	EBC101799	85%	100%	100%
ECO100093	ECO100093	100%	100%	100%
ECO100093	HIN101115	39%	83.7%	86.6%
ECO100093	KPN301845	88%	100%	100%
ECO100093	LPN103526	29%	85.1%	95.0%
ECO100093	MCA100437	24%	66.3%	74.6%
ECO100093	MAV103267	23%	43.8%	55.3%
ECO100093	MLP100571	24%	34.4%	27.9%
ECO100093	NGO100580	34%	85.9%	94.6%
ECO100093	NME201903	34%	85.9%	94.6%
ECO100093	PMU100145	37%	87.0%	93.4%
ECO100093	PRT102631	61%	93.8%	97.7%
ECO100093	PAE204407	31%	74.6%	70.0%
ECO100093	PPU105995	32%	90.9%	87.2%
ECO100093	PSY103839	33%	83.7%	81.3%
ECO100093	SPA101845	93%	100%	100%
ECO100093	STY103179	93%	100%	100%
ECO100093	STM102891	93%	100%	100%
ECO100093	SEP200899	22%	62.7%	39.8%
ECO100093	SHA100844	23%	62.0%	47.2%
ECO100093	VCH102364	39%	88.0%	90.4%
ECO100093	YPS001020	66%	97.5%	99.6%
ECO100094	ABA100623	30%	96.7%	95.7%
ECO100094	BAN111291	31%	94.3%	89.7%
ECO100094	BAN101900	32%	93.6%	88.2%
ECO100094	BFR102146	24%	79.8%	68.3%
ECO100094	BPT102984	45%	97.4%	98.0%
ECO100094	BBU100299	35%	98.6%	99.3%
ECO100094	BCE109663	46%	98.6%	98.8%
ECO100094	BFU100407	46%	98.6%	98.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100094	BMA104126	47%	98.6%	98.8%
ECO100094	CJU100645	27%	89.8%	80.3%
ECO100094	CAC100288	26%	89.0%	86.6%
ECO100094	CBO102974	28%	89.0%	85.0%
ECO100094	EBC101798	98%	100%	100%
ECO100094	EFA202170	33%	90.5%	83.6%
ECO100094	EFM201888	32%	89.8%	82.8%
ECO100094	ECO100094	100%	100%	100%
ECO100094	HIN101116	52%	100%	100%
ECO100094	HPY100962	25%	92.9%	83.9%
ECO100094	KPN300531	96%	58.3%	100%
ECO100094	LPN103001	44%	100%	100%
ECO100094	LMO101001	32%	95%	89.7%
ECO100094	MCA100438	25%	82.4%	78.9%
ECO100094	NGO100578	41%	97.6%	98.1%
ECO100094	NME201902	42%	97.1%	97.6%
ECO100094	PMU100146	50%	100%	100%
ECO100094	PRT102629	89%	100%	100%
ECO100094	PAE204406	51%	93.6%	92.6%
ECO100094	PPU111774	52%	90%	90.0%
ECO100094	PSY103837	52%	91.7%	92.2%
ECO100094	SPA101844	97%	100%	100%
ECO100094	STY103209	99%	100%	100%
ECO100094	STM102892	99%	100%	100%
ECO100094	SAU801185	24%	88.8%	76.6%
ECO100094	SEP200915	25%	88.8%	77.6%
ECO100094	SHA100845	25%	83.6%	71.9%
ECO100094	SMU100084	31%	89.0%	79.9%
ECO100094	SPN401510	33%	83.3%	74.8%
ECO100094	SPY201171	31%	89.0%	79.7%
ECO100094	TPA100385	33%	93.3%	95.9%
ECO100094	VCH102363	68%	100%	100%
ECO100094	YPS001022	95%	100%	100%
ECO100095	ABA100622	49%	95.8%	93.9%
ECO100095	BAN103024	47%	96.9%	96.4%
ECO100095	BAN112439	48%	96.9%	96.4%
ECO100095	BFR12421	43%	84.1%	74.1%
ECO100095	BPT102981	53%	97.1%	96.4%
ECO100095	BBU100298	47%	97.1%	92.3%
ECO100095	BCE103310	58%	75.7%	100%
ECO100095	BFU100408	52%	98.2%	97.7%
ECO100095	BMA104500	52%	99.7%	99.5%
ECO100095	CJU100646	40%	100%	98.9%
ECO100095	CAC100838	50%	96.9%	95.7%
ECO100095	CBO103263	49%	96.9%	96.5%
ECO100095	CDF102447	48%	98.4%	96.2%
ECO100095	CDP101254	51%	84.6%	77.9%
ECO100095	EBC101797	97%	41.5%	97.5%
ECO100095	EFA202168	51%	90.1%	84.1%
ECO100095	EFM200220	54%	82.0%	75.8%
ECO100095	ECO100095	100%	100%	100%
ECO100095	HIN101117	63%	79.9%	77.9%
ECO100095	HPY100963	40%	79.4%	79.5%
ECO100095	KPN300530	98%	41.8%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100095	LPN100473	71%	9.4%	100%
ECO100095	LMO101235	46%	96.9%	96.2%
ECO100095	MCA101528	55%	85.9%	91.9%
ECO100095	MAV103265	47%	96.6%	97.7%
ECO100095	MBV100533	53%	79.4%	79.9%
ECO100095	MLP100572	45%	96.6%	97.9%
ECO100095	MTU202116	53%	79.4%	79.9%
ECO100095	MGE100229	34%	54.6%	55.6%
ECO100095	MPN100519	32%	54.0%	53.4%
ECO100095	NGO100577	48%	96.9%	95.2%
ECO100095	NME201901	48%	96.9%	95.2%
ECO100095	PMU100147	62%	87.5%	82.7%
ECO100095	PRT102627	94%	48.8%	100%
ECO100095	PAE204405	57%	100%	100%
ECO100095	PPU105993	58%	100%	100%
ECO100095	PSY103835	57%	100%	100%
ECO100095	SPA100031	91%	67.1%	98.1%
ECO100095	STY103211	98%	100%	100%
ECO100095	STM102893	98%	100%	100%
ECO100095	SAU801186	52%	81.2%	79.0%
ECO100095	SEP200917	45%	97.4%	95.2%
ECO100095	SHA100846	45%	97.4%	95.2%
ECO100095	SMU100085	51%	89.6%	78.1%
ECO100095	SPN401509	56%	80.7%	73.5%
ECO100095	SPY201170	54%	82.0%	71.3%
ECO100095	TPA100386	49%	79.4%	72.7%
ECO100095	VCH102362	75%	100%	100%
ECO100095	YPS001023	94%	100%	100%
ECO100096	ABA100621	49%	71.5%	100%
ECO100096	BFR100706	38%	88.5%	63.3%
ECO100096	BPT102979	52%	97.7%	98.0%
ECO100096	BCE106802	54%	97.4%	97.0%
ECO100096	BFU106497	53%	97.4%	97.0%
ECO100096	BMA100406	55%	97.4%	97.0%
ECO100096	CJU100121	42%	94.1%	95.9%
ECO100096	CPN200093	36%	89.2%	95.8%
ECO100096	CTR200809	38%	90.8%	95.5%
ECO100096	EBC100070	97%	37.4%	100%
ECO100096	EFA204185	36%	16.4%	7.8%
ECO100096	ECO100096	100%	100%	100%
ECO100096	HIN101118	77%	99.7%	99.7%
ECO100096	HPY101035	42%	95.4%	96.9%
ECO100096	KPN300609	94%	76.7%	100%
ECO100096	MCA100416	54%	97.0%	97.7%
ECO100096	NGO101976	48%	96.4%	96.4%
ECO100096	NME200247	49%	96.4%	96.4%
ECO100096	PMU100148	77%	99.7%	99.7%
ECO100096	PRT100138	86%	90.8%	100%
ECO100096	PAE204404	57%	99.7%	100%
ECO100096	PPU111772	56%	99.7%	100%
ECO100096	PSY103834	56%	99.7%	100%
ECO100096	SPA100700	87%	100%	100%
ECO100096	STY103212	98%	100%	100%
ECO100096	STM102894	98%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100096	VCH102361	73%	100%	100%
ECO100096	YPS001024	92%	100%	98.1%
ECO100102	BPT102719	31%	100%	99.2%
ECO100102	BCE111292	30%	91.5%	91.2%
ECO100102	BFU101371	31%	98.4%	98.8%
ECO100102	BMA106052	30%	98.4%	98.8%
ECO100102	EBC103445	80%	100%	100%
ECO100102	ECO100102	100%	100%	100%
ECO100102	KPN301732	76%	97.6%	100%
ECO100102	LPN101018	24%	93.9%	92.7%
ECO100102	PRT104002	53%	98.4%	97.2%
ECO100102	PPU100250	45%	16.2%	97.6%
ECO100102	SPA101560	89%	100%	100%
ECO100102	STY103218	89%	100%	100%
ECO100102	VCH102393	40%	97.6%	97.6%
ECO100102	YPS000901	67%	100%	98.8%
ECO100113	BAN100380	31%	84.6%	98.2%
ECO100113	BMA109038	39%	90.6%	63.6%
ECO100113	CDF100440	28%	89.0%	86.6%
ECO100113	EBC103453	92%	100%	100%
ECO100113	ECO100113	100%	100%	100%
ECO100113	KPN307947	90%	24.0%	92.4%
ECO100113	KPN301741	93%	100%	98.1%
ECO100113	LMO100648	28%	89.4%	95.2%
ECO100113	MAV105850	25%	90.6%	92%
ECO100113	MAV106443	25%	91.7%	94.7%
ECO100113	MAV106442	28%	86.6%	85%
ECO100113	NGO100599	34%	96.9%	94.6%
ECO100113	NME201814	34%	96.9%	94.2%
ECO100113	PRT106136	79%	98.8%	96.2%
ECO100113	PAE204765	47%	97.6%	97.7%
ECO100113	PPU100113	46%	97.6%	98.8%
ECO100113	SPA100332	95%	100%	100%
ECO100113	STY103289	96%	100%	100%
ECO100113	STM102972	96%	100%	100%
ECO100113	VCH102380	65%	98.8%	98.0%
ECO100113	YPS000871	86%	99.6%	99.6%
ECO100115	ABA105536	46%	33.7%	68.0%
ECO100115	BAN101075	31%	0.2%	45.1%
ECO100115	BAN101226	36%	17.1%	43.7%
ECO100115	BPT100902	56%	0.2%	43.0%
ECO100115	BCE106716	56%	21.1%	4.3%
ECO100115	BFU100111	53%	25.9%	13.8%
ECO100115	BMA108930	53%	20.8%	55.4%
ECO100115	CJU100863	21%	4.3%	34.7%
ECO100115	CDP100400	34%	98.7%	98.2%
ECO100115	EBC102752	90%	100%	100%
ECO100115	EFA202405	34%	37.1%	59.6%
ECO100115	EFM201990	32%	37.1%	60.1%
ECO100115	ECO100115	100%	100%	100%
ECO100115	HIN101204	68%	34.6%	58.6%
ECO100115	KPN301446	91%	100%	100%
ECO100115	LPN100774	45%	10.3%	53.9%
ECO100115	LMO102367	35%	37.1%	60.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100115	MCA101150	39%	19.0%	44.2%
ECO100115	MAV103601	31%	1.6%	33.2%
ECO100115	MTU405582	32%	50.2%	84.6%
ECO100115	MTU400129	32%	64.4%	99.8%
ECO100115	MGE100278	25%	16.5%	26.3%
ECO100115	MPN100447	27%	3.2%	46.0%
ECO100115	NGO100078	53%	15.6%	38.0%
ECO100115	NME201414	56%	33.2%	19.6%
ECO100115	PMU100894	72%	100%	100%
ECO100115	PRT102280	78%	100%	100%
ECO100115	PAE205011	54%	83.0%	99.3%
ECO100115	PPU105100	54%	18.7%	59.2%
ECO100115	PSY103646	52%	20.2%	43.8%
ECO100115	SPA100283	80%	60.5%	100%
ECO100115	STY103294	93%	100%	100%
ECO100115	STM102974	93%	100%	100%
ECO100115	SAU101783	36%	39.8%	77.6%
ECO100115	SPY200777	30%	3.8%	35.4%
ECO100115	VCH102378	74%	100%	99.1%
ECO100115	YPS000863	79%	14.0%	37.7%
ECO100116	ABA101766	38%	95.6%	96.4%
ECO100116	BAN101609	33%	96.4%	97.0%
ECO100116	BAN103383	44%	96.4%	97.0%
ECO100116	BFR10034	33%	94.1%	98.2%
ECO100116	BFR11786	32%	94.1%	98.7%
ECO100116	BPT100905	63%	99.6%	79.2%
ECO100116	BCE110691	66%	97.9%	79.7%
ECO100116	BFU100082	65%	99.4%	92.9%
ECO100116	BMA107694	65%	99.6%	80.0%
ECO100116	CPN201018	35%	93.0%	94.1%
ECO100116	CTR200835	38%	93.0%	94.0%
ECO100116	CBO103777	35%	93.5%	95.2%
ECO100116	CBO103904	37%	94.7%	97.0%
ECO100116	CDF102926	38%	94.7%	95.7%
ECO100116	CDP100695	36%	96.6%	98.7%
ECO100116	EBC102751	97%	100%	100%
ECO100116	EFA202404	43%	96.4%	97.4%
ECO100116	EFM201020	42%	96.4%	97.4%
ECO100116	ECO100116	100%	100%	100%
ECO100116	HIN101203	81%	100%	99.2%
ECO100116	KPN301447	96%	100%	99.8%
ECO100116	LPN100879	62%	100%	100%
ECO100116	LMO101821	43%	95.4%	96.4%
ECO100116	MCA101643	37%	98.1%	98.8%
ECO100116	MAV101768	37%	95.6%	97.0%
ECO100116	MBV103409	37%	97.0%	98.7%
ECO100116	MLP101416	34%	97.0%	98.7%
ECO100116	MTU200460	37%	97.0%	98.7%
ECO100116	MGE100277	32%	93.7%	96.3%
ECO100116	MPN100448	33%	93.7%	96.3%
ECO100116	NGO100074	63%	99.4%	81.1%
ECO100116	NME201415	63%	99.4%	81.1%
ECO100116	PMU100893	88%	100%	100%
ECO100116	PRT102281	90%	100%	99.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100116	PAE201586	42%	98.5%	99.4%
ECO100116	PPU103115	40%	98.5%	99.4%
ECO100116	PSY104859	41%	98.5%	99.4%
ECO100116	SPA100336	96%	83.5%	100%
ECO100116	STY103295	98%	100%	99.8%
ECO100116	STM103004	98%	100%	100%
ECO100116	SAU801096	44%	95.6%	96.4%
ECO100116	SEP200806	45%	95.6%	96.4%
ECO100116	SHA100679	44%	95.6%	96.8%
ECO100116	SMU101480	36%	93.2%	74.7%
ECO100116	SPN401048	38%	93.2%	76.5%
ECO100116	SPY200778	35%	97.5%	77.7%
ECO100116	VCH102377	89%	100%	99.8%
ECO100116	YPS000861	93%	100%	99.8%
ECO100117	BPT103682	29%	59.3%	100%
ECO100117	BCE104746	29%	31.9%	62.8%
ECO100117	BFU101391	43%	46.8%	46.8%
ECO100117	BFU100907	41%	49.3%	57.2%
ECO100117	EBC102750	48%	89.5%	100%
ECO100117	EFA200061	22%	25.8%	20.0%
ECO100117	EFA201265	22%	25.8%	20.0%
ECO100117	ECO100117	100%	100%	100%
ECO100117	KPN305987	52%	91.2%	96.4%
ECO100117	MCA102218	28%	10.9%	46.5%
ECO100117	PPU101283	36%	77.3%	91.2%
ECO100117	SPA101490	56%	88.8%	100%
ECO100117	STY103296	58%	87.8%	98.0%
ECO100117	SAU800401	27%	13.1%	11.6%
ECO100117	SPN401793	29%	14.1%	22.7%
ECO100118	ABA100442	74%	99.3%	98.7%
ECO100118	BPT102269	72%	99.1%	99.5%
ECO100118	BCE109527	73%	99.3%	99.8%
ECO100118	BFU107948	74%	99.3%	98.1%
ECO100118	CJU100774	60%	98.4%	99.2%
ECO100118	EBC106332	96%	82.5%	100%
ECO100118	ECO100118	100%	100%	100%
ECO100118	HPY100766	61%	98.4%	99.2%
ECO100118	KPN300389	95%	18.2%	90.2%
ECO100118	KPN300864	96%	93.5%	100%
ECO100118	MCA101955	73%	95.5%	99.3%
ECO100118	NGO101334	74%	99.3%	99.8%
ECO100118	NME201620	74%	99.3%	99.8%
ECO100118	PMU100204	81%	99.9%	99.5%
ECO100118	PRT101310	88%	100%	100%
ECO100118	PAE201786	79%	99.0%	98.8%
ECO100118	PPU111285	79%	96.3%	96.0%
ECO100118	PSY101607	78%	99.0%	96.3%
ECO100118	SPA100508	94%	60%	100%
ECO100118	STY103298	96%	100%	100%
ECO100118	STM103008	96%	100%	100%
ECO100118	TPA100176	31%	13.3%	37.0%
ECO100118	VCH100593	82%	99.7%	99.7%
ECO100118	YPS000857	90%	100%	100%
ECO100135	ECO100135	100%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100135	SPA106733	29%	40.3%	97.3%
ECO100135	STY103389	32%	98.5%	97.2%
ECO100136	ECO100136	100%	100%	100%
ECO100136	SPA109709	36%	58.6%	98.2%
ECO100136	STY103420	37%	86.4%	84.8%
ECO100139	ABA100394	33%	96.0%	97.9%
ECO100139	ABA100739	36%	92.5%	97.6%
ECO100139	BFU103132	30%	68.4%	77.5%
ECO100139	BFU103304	38%	76.4%	92.9%
ECO100139	BFU103222	33%	94.7%	87.3%
ECO100139	ECO100139	100%	100%	100%
ECO100139	KPN302863	35%	94.3%	96.5%
ECO100139	PRT105280	35%	93.9%	93.8%
ECO100139	PAE204081	35%	93.2%	94.2%
ECO100139	SPA104033	45%	96.4%	100%
ECO100139	STY103424	60%	98.3%	98.4%
ECO100139	SHA101318	19%	16.4%	31.5%
ECO100139	SPY100688	22%	23.1%	53.9%
ECO100139	TPA100432	23%	19.5%	46.1%
ECO100139	YPS000524	36%	93.1%	91.7%
ECO100140	ABA100736	35%	95.1%	96.7%
ECO100140	ABA100392	40%	88.2%	88.2%
ECO100140	BPT101284	41%	87.0%	75.9%
ECO100140	BFU103245	39%	94.7%	97.9%
ECO100140	BFU103302	47%	93.9%	93.5%
ECO100140	ECO100140	100%	100%	100%
ECO100140	KPN302865	39%	91.5%	93.6%
ECO100140	PRT105676	42%	95.9%	90.7%
ECO100140	PAE204082	39%	87.0%	85.1%
ECO100140	PPU101843	34%	43.9%	81.8%
ECO100140	PSY105016	36%	87.0%	76.6%
ECO100140	SPA104034	48%	97.2%	95.2%
ECO100140	STY103425	57%	100%	100%
ECO100140	YPS000522	41%	96.7%	92.3%
ECO100142	ABA105477	47%	88.1%	85.6%
ECO100142	BAN112513	43%	84.3%	77.8%
ECO100142	BFR100366	39%	84.9%	88.9%
ECO100142	BPT101655	40%	88.7%	85.3%
ECO100142	BCE102263	49%	49.7%	62.9%
ECO100142	BFU102640	37%	99.4%	85.7%
ECO100142	BMA109305	39%	95.0%	87.4%
ECO100142	CJU100058	29%	79.9%	80.3%
ECO100142	CAC103001	38%	84.9%	48.7%
ECO100142	CBO100107	41%	87.4%	90.7%
ECO100142	CDF102980	37%	86.2%	50.6%
ECO100142	CDP100654	36%	93.7%	90.6%
ECO100142	EBC102063	85%	88.1%	100%
ECO100142	ECO100142	100%	100%	100%
ECO100142	HIN100063	56%	99.4%	98.1%
ECO100142	HPY101019	31%	86.2%	83.4%
ECO100142	KPN308497	77%	100%	100%
ECO100142	LPN102612	37%	88.1%	98.6%
ECO100142	LMO102140	42%	84.9%	84.3%
ECO100142	MCA100865	38%	99.4%	98.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100142	MAV104005	38%	88.7%	78.0%
ECO100142	MBV102400	33%	84.3%	73.9%
ECO100142	MLP100158	35%	80.5%	70.2%
ECO100142	MTU203554	33%	84.3%	73.9%
ECO100142	NGO101986	42%	84.3%	81.1%
ECO100142	NME200881	43%	84.3%	81.1%
ECO100142	PMU100865	57%	92.5%	88.5%
ECO100142	PRT102518	62%	97.5%	95.2%
ECO100142	PAE204724	51%	96.9%	94.4%
ECO100142	PPU108440	48%	99.4%	99.4%
ECO100142	PSY105158	53%	96.9%	93.3%
ECO100142	SPA104025	80%	98.1%	100%
ECO100142	STY103427	89%	90.6%	90.6%
ECO100142	SAU800516	40%	89.9%	89.9%
ECO100142	SEP201849	43%	87.4%	86.8%
ECO100142	SHA100112	41%	87.4%	86.8%
ECO100142	SMU100995	42%	86.2%	77.7%
ECO100142	SPN400269	36%	97.5%	55.2%
ECO100142	SPY200833	44%	87.4%	83.1%
ECO100142	VCH100582	58%	100%	95.2%
ECO100142	YPS000787	65%	93.1%	93.1%
ECO100144	ABA104779	45%	93.8%	91.9%
ECO100144	BPT100055	48%	88.6%	96.8%
ECO100144	BCE107846	45%	88.6%	95.6%
ECO100144	BFU114519	47%	83.1%	86.6%
ECO100144	BMA109098	46%	81.8%	88.9%
ECO100144	EBC102068	78%	92.9%	90.2%
ECO100144	ECO100144	100%	100%	100%
ECO100144	KPN306084	76%	92.9%	97.6%
ECO100144	MCA102257	34%	88.3%	93.8%
ECO100144	NGO101470	46%	91.9%	98.6%
ECO100144	NME201975	45%	91.9%	98.6%
ECO100144	PAE204720	48%	92.2%	96.9%
ECO100144	PPU108420	50%	93.8%	96.3%
ECO100144	PSY105149	44%	81.8%	96.9%
ECO100144	SPA104029	79%	80.5%	98.4%
ECO100144	STY103460	81%	96.4%	99.7%
ECO100144	VCH100584	56%	96.4%	98.0%
ECO100144	YPS000781	71%	91.2%	87.5%
ECO100145	ABA104294	63%	95.4%	81.5%
ECO100145	BAN111357	29%	69.5%	51.8%
ECO100145	BAN107715	31%	69.5%	46.5%
ECO100145	BPT100533	37%	94.7%	92.2%
ECO100145	BBU100167	29%	74.2%	92%
ECO100145	BCE102976	45%	78.8%	85.5%
ECO100145	BFU114180	43%	78.8%	84.9%
ECO100145	BMA106451	46%	78.8%	85.5%
ECO100145	CJU100114	26%	76.8%	97.5%
ECO100145	CTR200677	23%	74.2%	85.8%
ECO100145	CAC101598	27%	71.5%	58.5%
ECO100145	CBO101773	30%	63.6%	54.1%
ECO100145	CDF100661	32%	32.5%	30.1%
ECO100145	EBC102067	98%	100%	100%
ECO100145	ECO100145	100%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100145	HIN100061	75%	94.0%	97.9%
ECO100145	KPN304195	98%	100%	100%
ECO100145	LPN103126	72%	88.1%	84.2%
ECO100145	MCA101582	62%	86.1%	93.5%
ECO100145	NGO101937	45%	82.1%	89.1%
ECO100145	NME200203	45%	82.1%	89.1%
ECO100145	PMU100863	80%	94.0%	97.9%
ECO100145	PRT101562	94%	100%	100%
ECO100145	PAE204719	76%	86.8%	88.5%
ECO100145	PPU108418	68%	85.4%	83.8%
ECO100145	PSY100089	76%	74.2%	96.6%
ECO100145	SPA104031	97%	30.5%	100%
ECO100145	STY103461	98%	100%	100%
ECO100145	SAU801431	32%	31.1%	80.3%
ECO100145	SPY200759	50%	19.9%	34.7%
ECO100145	TPA100095	29%	56.3%	65%
ECO100145	VCH100585	85%	95.4%	97.3%
ECO100145	YPS000779	94%	100%	100%
ECO100148	CDP101536	34%	89.7%	99.0%
ECO100148	EBC102064	78%	69.9%	100%
ECO100148	ECO100148	100%	100%	100%
ECO100148	KPN304202	81%	98.2%	100%
ECO100148	PRT101564	55%	97.8%	99.6%
ECO100148	PAE203958	47%	97.6%	99.4%
ECO100148	PPU107649	45%	96.7%	99.5%
ECO100148	PSY108786	45%	97.6%	96.6%
ECO100148	SPA101069	75%	100%	100%
ECO100148	STY103465	84%	98.7%	100%
ECO100148	STM103140	84%	100%	100%
ECO100148	VCH100590	48%	97.9%	99.5%
ECO100148	YPS000776	65%	98.1%	98.6%
ECO100150	ABA103956	29%	98.5%	99.0%
ECO100150	BFR104161	21%	22.4%	18.2%
ECO100150	BFR100416	25%	19.0%	17.3%
ECO100150	BFR10467	21%	20.3%	20.2%
ECO100150	BFR11841	27%	16.1%	17.5%
ECO100150	BFR101776	25%	17.0%	16.1%
ECO100150	BFR103964	23%	20.5%	20.3%
ECO100150	BFR104855	31%	11.8%	13.2%
ECO100150	BFR100601	22%	44.0%	33.4%
ECO100150	BFR10065	27%	16.3%	36.7%
ECO100150	BFR103068	20%	21.4%	22.6%
ECO100150	BFR104786	21%	26.6%	24.0%
ECO100150	BFR10126	22%	86.9%	79.2%
ECO100150	BPT101854	38%	93.2%	83.9%
ECO100150	BCE111433	33%	82.6%	98.4%
ECO100150	BFU107418	24%	98.4%	96.3%
ECO100150	BMA109111	34%	95.9%	94.8%
ECO100150	EBC101242	89%	96.5%	100%
ECO100150	ECO100150	100%	100%	100%
ECO100150	HIN101435	26%	39.2%	87.2%
ECO100150	KPN304208	60%	100%	100%
ECO100150	MCA102097	23%	23.2%	19.8%
ECO100150	MBV102043	29%	9.1%	35.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100150	MTU202942	29%	9.1%	37.6%
ECO100150	PRT104914	33%	99.7%	98.9%
ECO100150	PAE202464	38%	91.7%	80.7%
ECO100150	PPU105337	38%	94.4%	97.9%
ECO100150	PSY101285	37%	97.3%	97.2%
ECO100150	SPA100272	91%	47.4%	100%
ECO100150	STY104553	35%	98.1%	99.3%
ECO100150	STM103144	73%	100%	100%
ECO100150	TPA100587	29%	14.1%	47.5%
ECO100150	VCH100198	32%	91.3%	90.7%
ECO100150	YPS000978	26%	96.5%	98.1%
ECO100151	BFR105362	32%	78.5%	82.5%
ECO100151	BFU102313	62%	98.1%	88.1%
ECO100151	CJU101278	38%	89.8%	94.0%
ECO100151	EFA201996	42%	87.5%	91.6%
ECO100151	ECO100151	100%	100%	100%
ECO100151	HPY100874	31%	90.9%	94.9%
ECO100151	KPN304210	92%	100%	100%
ECO100151	PRT102499	36%	89.8%	94.0%
ECO100151	PPU100161	42%	86.0%	87.6%
ECO100151	SPA100271	75%	67.5%	100%
ECO100151	STY103469	91%	100%	100%
ECO100151	STM103175	92%	100%	100%
ECO100151	SMU100116	38%	90.2%	88.4%
ECO100151	VCH100199	45%	92.1%	85.6%
ECO100151	YPS000155	79%	100%	100%
ECO100153	BAN110904	27%	94.4%	45.6%
ECO100153	BAN110932	31%	94.4%	94.7%
ECO100153	BCE113442	30%	4.2%	94.8%
ECO100153	BFU103716	31%	100%	95.5%
ECO100153	BMA103709	31%	99.5%	94.9%
ECO100153	CDP100079	29%	40.2%	95.7%
ECO100153	EBC105792	81%	1.4%	98.6%
ECO100153	ECO100153	100%	100%	100%
ECO100153	KPN304213	83%	100%	100%
ECO100153	SPA103168	82%	21.2%	98.9%
ECO100153	STY103491	90%	98.8%	95.2%
ECO100153	STM103177	90%	98.8%	95.2%
ECO100153	VCH100201	36%	97.4%	97.5%
ECO100153	YPS000152	68%	98.8%	98.2%
ECO100158	ABA104905	27%	65.0%	51.6%
ECO100158	BAN107089	25%	77.4%	65.7%
ECO100158	BFR101755	22%	61.7%	44.9%
ECO100158	BPT100813	34%	91.0%	84.2%
ECO100158	BCE101181	40%	62.8%	77.5%
ECO100158	BFU105758	34%	90.2%	83.2%
ECO100158	BMA108052	36%	94.7%	83.5%
ECO100158	CJU101523	28%	73.3%	73.1%
ECO100158	CAC103091	21%	60.2%	45.6%
ECO100158	CBO101985	29%	72.9%	64.1%
ECO100158	CDP100163	27%	64.3%	53.1%
ECO100158	EBC102140	77%	99.2%	99.2%
ECO100158	ECO100158	100%	100%	100%
ECO100158	HIN101441	22%	66.2%	56.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100158	HPY101538	24%	74.4%	55.8%
ECO100158	KPN308672	72%	99.6%	99.6%
ECO100158	LMO101056	29%	89.1%	81.3%
ECO100158	PRT105976	50%	95.9%	95.7%
ECO100158	PAE204042	30%	93.6%	95.1%
ECO100158	PPU104488	29%	94.4%	94.4%
ECO100158	PSY103310	25%	51.9%	44.0%
ECO100158	SPA102649	75%	76.3%	99.5%
ECO100158	STY103497	80%	100%	100%
ECO100158	SAU800609	27%	89.5%	85.4%
ECO100158	SEP200175	28%	85.3%	81.7%
ECO100158	SHA101549	26%	89.5%	83.2%
ECO100158	SPY201383	20%	74.1%	68.4%
ECO100158	VCH102346	37%	90.2%	89.1%
ECO100158	YPS000147	54%	97.0%	92.9%
ECO100161	BAN110062	37%	59.3%	71.5%
ECO100161	BAN107077	36%	78.9%	67.6%
ECO100161	BFR11675	39%	75.7%	74.7%
ECO100161	BPT102297	41%	74.3%	85.3%
ECO100161	BBU100104	34%	93.9%	92.1%
ECO100161	BCE109327	36%	95.6%	92.1%
ECO100161	BMA103894	36%	94.7%	91.5%
ECO100161	CJU101153	38%	95.1%	94.7%
ECO100161	CTR200205	40%	77.6%	75.5%
ECO100161	CBO100298	43%	57.6%	67.1%
ECO100161	EBC102486	91%	100%	100%
ECO100161	EFA202055	34%	92.2%	78.0%
ECO100161	EFM201658	36%	48.3%	95.8%
ECO100161	ECO100161	100%	100%	100%
ECO100161	HPY101002	42%	79.1%	88.9%
ECO100161	KPN304180	90%	100%	100%
ECO100161	LPN103539	41%	93.5%	95.2%
ECO100161	LMO101189	36%	60.3%	60.8%
ECO100161	MAV103189	34%	56.1%	53.4%
ECO100161	MBV100882	36%	56.1%	51.3%
ECO100161	MLP100663	35%	57.2%	51.4%
ECO100161	MTU201206	35%	56.1%	49.0%
ECO100161	PAE200765	38%	77.8%	99.6%
ECO100161	PSY102326	38%	73.4%	96.8%
ECO100161	SPA102656	90%	100%	96.5%
ECO100161	STY103840	92%	100%	100%
ECO100161	STM103213	92%	100%	100%
ECO100161	SAU801728	40%	57.6%	65.8%
ECO100161	SEP202073	41%	61.8%	73.1%
ECO100161	SHA100568	40%	59.1%	67.3%
ECO100161	SMU101421	38%	57.6%	72.6%
ECO100161	SPY201695	33%	69.8%	87.2%
ECO100161	TPA100832	34%	89.2%	88.7%
ECO100161	VCH100556	58%	100%	99.8%
ECO100161	YPS000135	75%	100%	100%
ECO100167	ABA104028	40%	94.6%	95.9%
ECO100167	BPT101104	38%	88.9%	91.7%
ECO100167	BCE102413	35%	83.9%	99.6%
ECO100167	BFU101941	36%	68.2%	99.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100167	BMA110028	36%	92.7%	95.5%
ECO100167	CDP101162	26%	47.1%	60.8%
ECO100167	EBC103102	90%	64.9%	99.5%
ECO100167	ECO100167	100%	100%	100%
ECO100167	HIN101684	46%	92.8%	95.6%
ECO100167	KPN306317	88%	97.2%	99.8%
ECO100167	LPN101443	37%	94.9%	98.1%
ECO100167	MCA101007	33%	95.1%	96.2%
ECO100167	MAV103401	24%	48.3%	90.3%
ECO100167	MBV102319	25%	93.8%	97.3%
ECO100167	MTU202880	25%	93.8%	97.3%
ECO100167	NGO100301	33%	92.1%	95.7%
ECO100167	NME201261	33%	92.2%	95.8%
ECO100167	PMU100460	46%	96.7%	99.3%
ECO100167	PRT104542	66%	77.3%	97.3%
ECO100167	PAE203656	42%	96.2%	96.1%
ECO100167	PPU105172	41%	93.7%	94.1%
ECO100167	PSY104380	42%	94.7%	94.8%
ECO100167	SPA100030	76%	41.9%	97.4%
ECO100167	STY103845	92%	100%	100%
ECO100167	VCH102228	53%	96.9%	98.0%
ECO100167	YPS001121	76%	98.8%	96.5%
ECO100169	ABA104000	72%	92.1%	88.8%
ECO100169	BAN100446	53%	76.8%	95.7%
ECO100169	BAN110084	53%	97.9%	98.7%
ECO100169	BFR104950	47%	97.1%	84.2%
ECO100169	BPT101108	59%	97.9%	97.2%
ECO100169	BBU100122	47%	92.5%	85.8%
ECO100169	BCE101166	55%	97.9%	98.0%
ECO100169	BFU101939	59%	92.5%	89.2%
ECO100169	BMA101604	56%	97.1%	98.8%
ECO100169	CJU101107	52%	98.8%	89.7%
ECO100169	CPN200048	43%	92.1%	79.8%
ECO100169	CTR200051	45%	88.8%	75.8%
ECO100169	CAC101756	52%	93.4%	97.0%
ECO100169	CBO103187	53%	93.4%	97.0%
ECO100169	CDF101764	54%	97.5%	99.2%
ECO100169	CDP101120	50%	93.4%	85.0%
ECO100169	EBC103098	97%	100%	100%
ECO100169	EFA200418	51%	99.2%	91.2%
ECO100169	ECO100169	100%	100%	100%
ECO100169	HIN100892	82%	100%	95.6%
ECO100169	HPY101531	47%	98.8%	90.9%
ECO100169	KPN301398	98%	95.0%	100%
ECO100169	LPN100646	57%	99.2%	94.9%
ECO100169	LMO100442	53%	99.2%	96.0%
ECO100169	MCA101251	67%	92.1%	81.9%
ECO100169	MAV106404	52%	92.9%	81.2%
ECO100169	MBV102282	52%	92.9%	78.0%
ECO100169	MLP100973	52%	92.9%	80.9%
ECO100169	MTU202852	52%	92.9%	78.0%
ECO100169	MGE100072	36%	92.1%	78.5%
ECO100169	MPN100623	39%	92.5%	76.2%
ECO100169	NGO100893	53%	99.2%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100169	NME200306	52%	99.2%	100%
ECO100169	PMU101984	84%	100%	95.2%
ECO100169	PRT105507	90%	100%	100%
ECO100169	PAE203654	73%	99.6%	97.2%
ECO100169	PPU107884	70%	93.8%	92.2%
ECO100169	PSY108183	72%	93.8%	84.6%
ECO100169	SPA101195	97%	100%	100%
ECO100169	STY103848	97%	100%	100%
ECO100169	STM103561	97%	100%	100%
ECO100169	SAU801256	51%	93.4%	88.2%
ECO100169	SEP201549	52%	93.4%	85.9%
ECO100169	SHA100713	50%	70.1%	81.2%
ECO100169	SMU100628	49%	99.6%	92.0%
ECO100169	SPN402017	48%	100%	93.1%
ECO100169	SPY201599	50%	100%	94.5%
ECO100169	TPA100599	48%	94.2%	78.0%
ECO100169	UUR100024	36%	91.3%	63.3%
ECO100169	VCH102226	82%	100%	100%
ECO100169	YPS001127	93%	100%	100%
ECO100170	ABA106144	54%	98.2%	97.9%
ECO100170	BAN110110	37%	94.3%	97.2%
ECO100170	BAN103067	47%	98.9%	99.0%
ECO100170	BFR10353	32%	90.5%	97.9%
ECO100170	BPT101109	49%	98.2%	97.9%
ECO100170	BBU100121	33%	87.6%	92.8%
ECO100170	BCE107064	48%	98.2%	96.9%
ECO100170	BFU100280	49%	98.2%	96.9%
ECO100170	BMA107429	49%	98.2%	96.9%
ECO100170	CJU101106	35%	98.2%	99.4%
ECO100170	CPN200047	33%	92.6%	99.6%
ECO100170	CTR200050	35%	86.9%	91.8%
ECO100170	CAC101812	44%	98.9%	99.3%
ECO100170	CBO101301	42%	98.6%	99.0%
ECO100170	CDF101762	43%	99.3%	100%
ECO100170	CDP101115	43%	92.9%	99.6%
ECO100170	EBC103096	95%	100%	100%
ECO100170	EFA200421	41%	99.3%	99.7%
ECO100170	ECO100170	100%	100%	100%
ECO100170	HIN100893	71%	98.9%	98.6%
ECO100170	HPY101532	36%	99.3%	100%
ECO100170	KPN301399	96%	100%	100%
ECO100170	LPN100716	52%	98.2%	98.6%
ECO100170	LMO102014	45%	99.6%	100%
ECO100170	MCA101252	52%	98.2%	97.6%
ECO100170	MAV106405	40%	92.9%	99.6%
ECO100170	MBV102285	39%	92.9%	99.6%
ECO100170	MLP100972	37%	92.9%	99.6%
ECO100170	MTU202851	39%	92.9%	99.6%
ECO100170	MGE100443	39%	97.2%	98.0%
ECO100170	MPN100211	40%	97.2%	98.0%
ECO100170	NGO100890	50%	99.3%	99.6%
ECO100170	NME200305	50%	99.3%	99.6%
ECO100170	PMU101985	74%	99.3%	99.6%
ECO100170	PRT104501	74%	99.3%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100170	PAE203653	57%	98.2%	97.6%
ECO100170	PPU107887	58%	98.2%	97.6%
ECO100170	PSY104373	58%	98.2%	97.6%
ECO100170	SPA101193	96%	100%	100%
ECO100170	STY103870	96%	100%	100%
ECO100170	STM103563	96%	100%	100%
ECO100170	SAU801257	43%	99.3%	100%
ECO100170	SEP201550	43%	98.2%	99.3%
ECO100170	SHA100714	43%	98.2%	99.3%
ECO100170	SMU100627	38%	98.2%	97.7%
ECO100170	SPN402016	39%	98.2%	97.7%
ECO100170	SPY201600	38%	98.2%	97.7%
ECO100170	TPA100598	30%	90.8%	95.9%
ECO100170	UUR100520	39%	97.9%	99.0%
ECO100170	VCH102225	70%	98.2%	98.9%
ECO100170	YPS001128	77%	100%	100%
ECO100171	ABA101328	60%	99.2%	100%
ECO100171	BAN107431	43%	97.5%	98.3%
ECO100171	BAN103009	48%	97.5%	98.3%
ECO100171	BFR104169	53%	90.0%	98.6%
ECO100171	BPT101110	55%	95.9%	97.1%
ECO100171	BCE109906	58%	95.9%	97.5%
ECO100171	BFU100279	57%	95.9%	97.5%
ECO100171	BMA109323	57%	95.9%	97.5%
ECO100171	CJU101199	49%	92.9%	94.1%
ECO100171	CPN200046	38%	96.3%	94.0%
ECO100171	CTR200049	38%	88.4%	88.2%
ECO100171	CAC103602	49%	96.7%	97.9%
ECO100171	CBO103420	47%	97.5%	97.9%
ECO100171	CDF101760	47%	97.1%	98.7%
ECO100171	CDP101114	44%	97.9%	96.7%
ECO100171	EBC103094	97%	100%	100%
ECO100171	EFA200424	48%	97.1%	97.9%
ECO100171	ECO100171	100%	100%	100%
ECO100171	HIN101042	77%	97.5%	99.2%
ECO100171	HPY100764	51%	93.8%	94.6%
ECO100171	KPN301400	98%	100%	100%
ECO100171	LPN101596	61%	95.9%	93.9%
ECO100171	LMO102234	47%	96.7%	97.1%
ECO100171	MCA100778	60%	98.3%	98.8%
ECO100171	MAV106392	46%	96.3%	87.2%
ECO100171	MBV102299	45%	96.3%	88.5%
ECO100171	MLP100970	46%	96.3%	82.8%
ECO100171	MTU202845	45%	96.3%	88.5%
ECO100171	MGE100444	35%	90.9%	90.5%
ECO100171	MPN100210	34%	95.0%	97.9%
ECO100171	NGO100888	53%	95.9%	96.7%
ECO100171	NME200304	53%	95.9%	96.7%
ECO100171	PMU101986	79%	98.3%	97.9%
ECO100171	PRT104887	91%	99.6%	99.2%
ECO100171	PAE203652	69%	97.9%	96.3%
ECO100171	PPU102433	69%	97.9%	95.5%
ECO100171	PSY104372	69%	96.7%	94.3%
ECO100171	SPA101722	94%	47.3%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100171	STY103871	98%	100%	100%
ECO100171	STM103564	98%	100%	100%
ECO100171	SAU801258	44%	96.7%	97.5%
ECO100171	SEP201551	45%	100%	100%
ECO100171	SHA100715	45%	100%	90.9%
ECO100171	SMU101143	47%	97.5%	96.3%
ECO100171	SPN400845	49%	97.9%	96.0%
ECO100171	SPY200331	48%	97.5%	97.5%
ECO100171	TPA100098	31%	25.3%	24.3%
ECO100171	UUR100519	35%	96.3%	98.7%
ECO100171	VCH102224	85%	100%	99.2%
ECO100171	YPS001129	90%	100%	100%
ECO100179	ABA101312	39%	97.7%	99.1%
ECO100179	BFR105934	35%	97.1%	96.0%
ECO100179	BPT101128	42%	91.5%	89.3%
ECO100179	BCE111319	41%	99.1%	98.3%
ECO100179	BFU114742	39%	96.5%	92.7%
ECO100179	BMA109885	39%	97.4%	96.1%
ECO100179	CJU100537	34%	95.3%	99.7%
ECO100179	CPN200450	34%	98.5%	94.7%
ECO100179	CTR200507	33%	99.1%	96.9%
ECO100179	CBO103766	28%	23.8%	84.3%
ECO100179	EBC103091	89%	100%	100%
ECO100179	ECO100179	100%	100%	100%
ECO100179	HIN100894	65%	98.5%	99.1%
ECO100179	HPY100193	31%	90.9%	91.4%
ECO100179	KPN301403	92%	90.6%	100%
ECO100179	LPN102597	35%	99.1%	99.7%
ECO100179	MCA100324	44%	87.7%	90.8%
ECO100179	NGO100826	38%	97.7%	96.3%
ECO100179	NME200082	38%	97.7%	96.3%
ECO100179	PMU101994	65%	98.2%	98.5%
ECO100179	PRT101247	80%	100%	99.7%
ECO100179	PAE203644	51%	98.2%	94.9%
ECO100179	PPU101150	49%	98.5%	95.7%
ECO100179	PSY104345	50%	98.2%	95.4%
ECO100179	SPA100512	85%	83.6%	58.2%
ECO100179	STY103879	95%	100%	100%
ECO100179	STM103592	95%	100%	100%
ECO100179	VCH102216	64%	100%	97.2%
ECO100179	YPS001147	82%	99.7%	100%
ECO100180	ABA101324	44%	94.0%	100%
ECO100180	BAN112058	43%	56.3%	92.2%
ECO100180	BAN101529	48%	92.1%	95.1%
ECO100180	BPT101129	51%	92.1%	94.7%
ECO100180	BCE105358	58%	96.0%	94.2%
ECO100180	BFU107782	52%	96.0%	93.5%
ECO100180	BFU105730	55%	96.7%	94.8%
ECO100180	BMA107929	57%	96.0%	94.2%
ECO100180	CJU100245	47%	90.1%	94.5%
ECO100180	CPN200094	44%	92.1%	91.5%
ECO100180	CTR200808	43%	90.1%	89.5%
ECO100180	CAC102008	45%	89.4%	94.3%
ECO100180	CBO103374	45%	90.7%	93.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100180	CDF104046	51%	25.8%	97.5%
ECO100180	CDF101479	42%	57.6%	95.5%
ECO100180	CDF100018	52%	78.8%	96.7%
ECO100180	EBC103090	93%	39.1%	78.7%
ECO100180	EBC100020	91%	57.0%	84.3%
ECO100180	EBC100023	91%	57.0%	84.3%
ECO100180	EFA203430	50%	90.1%	95.0%
ECO100180	EFM202041	50%	90.1%	96.4%
ECO100180	ECO100180	100%	100%	100%
ECO100180	HIN101039	68%	92.7%	93.9%
ECO100180	HPY101356	46%	88.7%	86.8%
ECO100180	KPN301913	97%	100%	100%
ECO100180	LPN101746	52%	84.8%	89.0%
ECO100180	LMO100873	51%	93.4%	96.5%
ECO100180	MCA100038	44%	96.0%	83.4%
ECO100180	MBV105275	29%	45.0%	31.9%
ECO100180	NGO100839	55%	92.7%	94.0%
ECO100180	NME200083	55%	92.7%	94.0%
ECO100180	PMU101995	70%	96.7%	95.4%
ECO100180	PRT101246	83%	97.4%	85.5%
ECO100180	PAE203643	54%	94.0%	98.6%
ECO100180	PPU101164	57%	92.1%	96.6%
ECO100180	PSY104344	56%	94.0%	98.6%
ECO100180	SPA100773	99%	100%	100%
ECO100180	STY103910	99%	100%	100%
ECO100180	STM103593	98%	100%	100%
ECO100180	SAU802098	46%	89.4%	91.1%
ECO100180	SEP204192	44%	89.4%	91.7%
ECO100180	SHA100083	38%	35.8%	93.1%
ECO100180	SMU100534	46%	92.1%	97.1%
ECO100180	SPN400384	46%	92.1%	97.1%
ECO100180	SPY201345	46%	92.1%	97.8%
ECO100180	VCH102215	64%	97.4%	96.1%
ECO100180	YPS001148	89%	100%	83.4%
ECO100183	ABA101887	65%	93.4%	98.9%
ECO100183	BAN111817	53%	82.3%	68.9%
ECO100183	BAN113438	54%	90.9%	69.6%
ECO100183	BFR12457	51%	88.4%	87.6%
ECO100183	BPT101141	58%	93.4%	92.0%
ECO100183	BBU100046	37%	89.4%	98.3%
ECO100183	BCE104245	60%	94.4%	87.4%
ECO100183	BFU105066	58%	92.4%	74.2%
ECO100183	BMA107189	60%	94.4%	87.4%
ECO100183	CJU100010	38%	87.9%	88.5%
ECO100183	CPN200642	41%	96.0%	88.8%
ECO100183	CTR200293	46%	92.4%	84.3%
ECO100183	CAC100322	41%	89.4%	71.7%
ECO100183	CBO102656	41%	91.9%	69.1%
ECO100183	CDF100890	49%	88.9%	69.0%
ECO100183	CDP101132	45%	79.8%	93.6%
ECO100183	EBC102552	89%	100%	100%
ECO100183	EFA201281	50%	91.9%	71.0%
ECO100183	EFM202475	51%	91.9%	72.1%
ECO100183	ECO100183	100%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100183	HIN101036	72%	96.5%	98.0%
ECO100183	HPY101305	33%	92.9%	91.9%
ECO100183	KPN301923	89%	100%	99.5%
ECO100183	LPN101418	62%	90.9%	93.2%
ECO100183	LMO102644	47%	91.9%	69.3%
ECO100183	MCA101524	38%	90.9%	85.8%
ECO100183	MAV102888	46%	91.4%	76.6%
ECO100183	MBV102296	48%	91.4%	69.3%
ECO100183	MLP100982	48%	91.4%	75.4%
ECO100183	MTU202864	48%	91.4%	69.3%
ECO100183	NGO100782	61%	92.9%	95.4%
ECO100183	NME200070	61%	92.9%	95.4%
ECO100183	PMU101998	72%	96.5%	97.5%
ECO100183	PRT101243	75%	98.5%	99.5%
ECO100183	PAE203640	71%	94.4%	93.0%
ECO100183	PPU101167	72%	92.4%	88.4%
ECO100183	PSY106718	71%	92.4%	82.4%
ECO100183	STY103913	92%	100%	100%
ECO100183	STM103626	92%	100%	100%
ECO100183	SAU801244	44%	92.9%	71.8%
ECO100183	SEP201538	45%	91.4%	69.2%
ECO100183	SHA101009	43%	91.4%	70.6%
ECO100183	SMU100101	45%	93.4%	71.9%
ECO100183	SPN401044	49%	91.4%	69.5%
ECO100183	SPY200888	46%	90.9%	69.2%
ECO100183	UUR100400	35%	38.9%	25.3%
ECO100183	VCH102212	73%	93.9%	90.3%
ECO100183	YPS001153	84%	97.5%	97.5%
ECO100184	ABA101411	48%	99.6%	96.4%
ECO100184	BAN112326	36%	99.2%	99.5%
ECO100184	BFR102018	33%	96.8%	95.0%
ECO100184	BPT101552	48%	99.7%	99.3%
ECO100184	BBU100578	38%	99.2%	98.1%
ECO100184	BCE115231	49%	99.9%	100%
ECO100184	BFU107633	47%	99.9%	99.7%
ECO100184	BMA101634	48%	99.9%	100%
ECO100184	CJU100668	39%	89.9%	88.7%
ECO100184	CPN200079	37%	92.5%	89.8%
ECO100184	CTR200821	36%	92.5%	90.0%
ECO100184	CAC103161	39%	90.5%	91.0%
ECO100184	CBO100607	34%	99.7%	99.8%
ECO100184	CBO101196	35%	99.6%	99.2%
ECO100184	CDF101163	40%	92.2%	91.0%
ECO100184	CDP101233	34%	98.8%	99.1%
ECO100184	EBC102553	94%	100%	100%
ECO100184	EFA202115	32%	96.2%	96.7%
ECO100184	EFM200294	32%	99.1%	99.5%
ECO100184	ECO100184	100%	100%	100%
ECO100184	HIN100720	71%	99.9%	99.8%
ECO100184	HPY101439	39%	92.5%	91.3%
ECO100184	KPN301922	95%	100%	100%
ECO100184	LPN102982	56%	99.6%	99.7%
ECO100184	LMO100629	35%	99.4%	99.8%
ECO100184	MCA102321	49%	89.4%	86.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100184	MAV100203	34%	7.7%	90.7%
ECO100184	MAV103371	35%	99.2%	99.5%
ECO100184	MBV102577	35%	97.8%	99.1%
ECO100184	MLP100747	35%	99.2%	99.5%
ECO100184	MTU201526	36%	98.8%	98.7%
ECO100184	MGE100266	27%	72.6%	89.6%
ECO100184	MPN100459	36%	18.4%	19.4%
ECO100184	NGO101860	47%	99.9%	100%
ECO100184	NME200585	47%	99.9%	100%
ECO100184	PMU100034	71%	99.9%	99.8%
ECO100184	PRT101242	85%	98.6%	100%
ECO100184	PAE203638	58%	99.5%	99.6%
ECO100184	PPU100137	58%	99.9%	99.9%
ECO100184	PSY104339	57%	99.5%	99.6%
ECO100184	SPA100912	92%	99.3%	100%
ECO100184	STY103914	96%	100%	100%
ECO100184	STM103627	96%	100%	100%
ECO100184	SAU801703	33%	93.0%	93.8%
ECO100184	SEP201707	33%	92.0%	92.4%
ECO100184	SHA100359	33%	96.0%	94.2%
ECO100184	SMU101018	30%	90.8%	92.0%
ECO100184	SPN400795	31%	95.3%	95.0%
ECO100184	SPY200987	29%	96.2%	96.8%
ECO100184	TPA100661	39%	92.8%	90.7%
ECO100184	UUR100419	29%	87.0%	94.4%
ECO100184	VCH102211	76%	100%	99.6%
ECO100184	YPS001155	88%	100%	99.1%
ECO100185	ABA100308	57%	80.9%	94.1%
ECO100185	BAN105768	55%	97.8%	95.4%
ECO100185	BPT101398	64%	99.4%	97.8%
ECO100185	BCE106451	64%	99.4%	97.2%
ECO100185	BFU100947	64%	99.4%	97.2%
ECO100185	BMA107589	64%	99.4%	97.2%
ECO100185	CJU100411	49%	98.4%	97.8%
ECO100185	CPN200335	44%	98.7%	96.3%
ECO100185	CTR200529	45%	98.7%	96.3%
ECO100185	CAC100492	52%	81.8%	95.3%
ECO100185	CBO102220	51%	89.3%	50.3%
ECO100185	CDF101403	50%	96.6%	97.1%
ECO100185	EBC102554	96%	100%	100%
ECO100185	EFA200247	52%	79.6%	96.9%
ECO100185	EFM200190	55%	81.5%	99.6%
ECO100185	ECO100185	100%	100%	100%
ECO100185	HIN100386	74%	99.7%	99.7%
ECO100185	HPY100550	48%	98.1%	96.8%
ECO100185	KPN301921	96%	100%	100%
ECO100185	LPN101352	62%	84.0%	99.3%
ECO100185	LMO100159	52%	98.4%	97.8%
ECO100185	MCA100190	60%	80.3%	100%
ECO100185	MLP100072	28%	46.4%	27.9%
ECO100185	NGO100369	64%	98.1%	97.2%
ECO100185	NME201237	64%	98.1%	97.2%
ECO100185	PMU100292	75%	99.7%	99.7%
ECO100185	PRT100667	69%	99.7%	99.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100185	PRT101241	88%	99.7%	99.7%
ECO100185	PAE203637	69%	99.4%	99.4%
ECO100185	PPU101171	67%	99.4%	99.7%
ECO100185	PSY108491	67%	99.4%	99.1%
ECO100185	SPA100816	80%	88.4%	100%
ECO100185	STY103916	97%	100%	100%
ECO100185	STM103628	97%	100%	100%
ECO100185	SAU801700	52%	97.8%	98.4%
ECO100185	SEP201704	52%	97.8%	98.4%
ECO100185	SHA100923	52%	97.8%	98.1%
ECO100185	SMU100529	54%	79.9%	98.0%
ECO100185	SPN400387	50%	79.9%	98.4%
ECO100185	SPY201342	52%	79.9%	98.0%
ECO100185	VCH102210	75%	99.7%	99.7%
ECO100185	YPS001157	90%	99.7%	99.7%
ECO100193	CJU100189	40%	16.1%	23.4%
ECO100193	ECO100193	100%	100%	100%
ECO100193	KPN300059	73%	55.8%	100%
ECO100193	KPN301914	66%	88.7%	92.5%
ECO100193	TPA100217	26%	29.1%	82.4%
ECO100193	YPS000139	43%	83.6%	84.2%
ECO100194	ABA100529	68%	99.3%	100%
ECO100194	BAN100354	47%	99.0%	99.3%
ECO100194	BAN103931	51%	99.8%	100%
ECO100194	BFR100495	28%	33.2%	0.2%
ECO100194	BPT102439	60%	96.7%	96.5%
ECO100194	BBU100401	28%	87.1%	65.4%
ECO100194	BCE111561	67%	38.6%	99.5%
ECO100194	BFU106495	56%	99.8%	99.1%
ECO100194	BMA104091	56%	99.8%	99.1%
ECO100194	CJU100505	45%	99.7%	99.6%
ECO100194	CPN200251	43%	97.4%	97.5%
ECO100194	CTR200662	39%	99.7%	97.9%
ECO100194	CAC100467	49%	98.4%	97.4%
ECO100194	CBO100123	28%	98.6%	98.3%
ECO100194	CDF100404	47%	12.8%	76.6%
ECO100194	CDF100250	47%	98.6%	97.5%
ECO100194	CDP100483	40%	99.5%	99.1%
ECO100194	EBC102546	93%	99.8%	100%
ECO100194	EFA200454	47%	96.7%	95.8%
ECO100194	EFM201684	47%	99.0%	98.6%
ECO100194	ECO100194	100%	100%	100%
ECO100194	HIN100709	75%	99.7%	99.5%
ECO100194	HPY100234	39%	99.8%	99.7%
ECO100194	KPN301911	94%	96.0%	100%
ECO100194	LPN102483	71%	16.4%	100%
ECO100194	LMO100624	49%	99.0%	98.8%
ECO100194	MCA101839	60%	98.4%	99.5%
ECO100194	MAV102826	40%	97.4%	97.6%
ECO100194	MBV103229	40%	97.4%	97.6%
ECO100194	MLP100951	27%	93.0%	73.1%
ECO100194	MTU202807	40%	97.7%	97.3%
ECO100194	NGO100106	60%	98.4%	98.4%
ECO100194	NME201412	60%	98.4%	98.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100194	PMU101370	76%	99.0%	98.9%
ECO100194	PRT101177	79%	99.7%	99.8%
ECO100194	PAE200955	71%	99.7%	99.6%
ECO100194	PPU108855	68%	96.5%	99.6%
ECO100194	PSY105509	67%	99.8%	99.8%
ECO100194	SPA100809	89%	98.4%	100%
ECO100194	STY103990	95%	100%	100%
ECO100194	SAU801263	44%	99.5%	99.1%
ECO100194	SEP201556	46%	99.8%	99.5%
ECO100194	SHA101150	47%	98.3%	97.9%
ECO100194	SMU101082	40%	99.0%	99.2%
ECO100194	SPN400243	42%	99.0%	99.0%
ECO100194	SPY201510	41%	99.0%	98.9%
ECO100194	TPA100158	40%	93.7%	93.7%
ECO100194	VCH100859	71%	99.0%	99.1%
ECO100194	YPS002005	84%	99.8%	99.8%
ECO100195	ABA103785	37%	94.5%	93.0%
ECO100195	BAN110343	34%	40%	58.0%
ECO100195	CBO101676	39%	39.6%	91.4%
ECO100195	CDF101307	33%	43.8%	65.2%
ECO100195	EBC102547	82%	100%	100%
ECO100195	ECO100195	100%	100%	100%
ECO100195	HIN100489	51%	94.5%	92.9%
ECO100195	KPN301908	85%	100%	100%
ECO100195	MCA100700	39%	74.9%	93.7%
ECO100195	NGO100030	42%	98.7%	98.2%
ECO100195	NME200229	42%	96.2%	95.6%
ECO100195	PMU101170	54%	93.6%	89.4%
ECO100195	PRT101178	62%	100%	100%
ECO100195	PAE203386	48%	90.2%	89.6%
ECO100195	PPU108086	47%	90.2%	90%
ECO100195	PSY104415	45%	95.3%	95.2%
ECO100195	SPA100206	89%	37.9%	100%
ECO100195	STY103991	88%	100%	100%
ECO100195	VCH100860	52%	98.3%	99.1%
ECO100195	YPS002007	71%	100%	100%
ECO100197	ABA101419	34%	88.6%	99.2%
ECO100197	ABA101431	41%	81.9%	81.2%
ECO100197	BAN110744	44%	91.5%	96.2%
ECO100197	BAN101917	44%	94.5%	96.3%
ECO100197	BPT102034	47%	100%	100%
ECO100197	BCE106577	56%	87.1%	80.3%
ECO100197	BFU102067	50%	96.3%	95.9%
ECO100197	BMA104983	54%	97.0%	96.3%
ECO100197	CJU100709	37%	85.6%	89.9%
ECO100197	CJU101125	41%	80.4%	81.3%
ECO100197	CJU100710	42%	84.9%	87.9%
ECO100197	CJU100711	45%	82.3%	86.0%
ECO100197	CPN200473	31%	93.0%	93.8%
ECO100197	CAC100740	40%	95.2%	93.4%
ECO100197	CBO102481	33%	92.3%	92.6%
ECO100197	CBO101824	41%	94.5%	94.1%
ECO100197	CBO103909	45%	91.9%	92.2%
ECO100197	CDF100529	43%	97.8%	98.5%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100197	CDP100114	31%	98.2%	91.7%
ECO100197	CDP100115	32%	94.5%	88.3%
ECO100197	EBC102539	96%	100%	100%
ECO100197	EFA201785	40%	98.2%	97.5%
ECO100197	EFM201963	38%	98.2%	97.2%
ECO100197	ECO100197	100%	100%	100%
ECO100197	HIN100600	60%	98.9%	99.6%
ECO100197	HPY101541	42%	97.4%	97.8%
ECO100197	KPN301905	95%	100%	100%
ECO100197	LPN100686	45%	95.2%	98.8%
ECO100197	LMO100978	47%	94.5%	93.8%
ECO100197	MCA103679	55%	98.5%	99.3%
ECO100197	NGO101326	37%	96.3%	94.1%
ECO100197	NME200471	38%	96.3%	94.1%
ECO100197	PMU101730	58%	98.9%	99.6%
ECO100197	PRT100159	78%	100%	100%
ECO100197	PAE205500	47%	78.6%	81.2%
ECO100197	PPU101952	47%	78.6%	82.4%
ECO100197	PSY101363	51%	78.6%	82.1%
ECO100197	SPA101556	37%	88.2%	87.3%
ECO100197	STY103993	96%	100%	100%
ECO100197	STM100616	37%	88.2%	87.3%
ECO100197	SAU800839	36%	97.0%	98.2%
ECO100197	SEP201451	37%	97.0%	98.1%
ECO100197	SHA100334	38%	92.6%	93.0%
ECO100197	SHA101832	35%	97.0%	97.4%
ECO100197	SMU100488	33%	93.4%	93.6%
ECO100197	SPN400147	35%	96.7%	97.5%
ECO100197	SPY200233	36%	100%	100%
ECO100197	TPA100812	34%	98.9%	98.5%
ECO100197	VCH100889	68%	100%	97.8%
ECO100197	YPS002011	90%	100%	100%
ECO100198	ABA101423	45%	100%	99.1%
ECO100198	BAN105551	52%	76.0%	81.3%
ECO100198	BAN106583	47%	96.3%	94.6%
ECO100198	BPT103178	52%	100%	100%
ECO100198	BCE112661	54%	98.2%	100%
ECO100198	BFU102065	54%	100%	95.2%
ECO100198	BMA106456	54%	98.2%	100%
ECO100198	CJU100712	44%	89.4%	64.0%
ECO100198	CPN200472	36%	95.9%	94.1%
ECO100198	CAC101527	43%	96.3%	95.9%
ECO100198	CBO103376	48%	95.9%	98.6%
ECO100198	CDF100530	48%	92.6%	92.2%
ECO100198	CDP100111	39%	94.5%	91.1%
ECO100198	EBC102541	97%	100%	100%
ECO100198	EFA201706	46%	93.5%	89.0%
ECO100198	EFM202483	44%	94.9%	91.2%
ECO100198	ECO100198	100%	100%	100%
ECO100198	HPY101554	43%	96.3%	96.7%
ECO100198	KPN301904	95%	100%	100%
ECO100198	LPN101477	53%	99.1%	99.1%
ECO100198	LMO100259	45%	98.2%	95.5%
ECO100198	MCA103062	45%	98.6%	93.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100198	NGO101323	43%	96.3%	91.7%
ECO100198	NME200470	43%	96.3%	91.7%
ECO100198	PMU101729	49%	95.4%	90.8%
ECO100198	PRT100130	83%	100%	100%
ECO100198	PAE202349	48%	98.6%	98.6%
ECO100198	PPU109980	50%	97.7%	100%
ECO100198	PSY103687	48%	98.2%	94.7%
ECO100198	SPA100613	90%	85.3%	100%
ECO100198	STY103994	92%	97.7%	100%
ECO100198	STM100618	44%	93.5%	92.7%
ECO100198	SAU800463	50%	95.9%	95.0%
ECO100198	SEP201771	50%	95.9%	95.0%
ECO100198	SHA100333	46%	98.6%	89.0%
ECO100198	SMU100477	40%	97.2%	90.8%
ECO100198	SPN400150	41%	94.5%	88.7%
ECO100198	SPY200235	42%	94.5%	92.7%
ECO100198	TPA100118	40%	95.4%	95.0%
ECO100198	VCH100890	53%	96.8%	93.3%
ECO100198	YPS002016	90%	100%	100%
ECO100201	ABA104598	65%	100%	100%
ECO100201	BPT102715	65%	100%	100%
ECO100201	BCE100085	66%	99.3%	93.6%
ECO100201	EBC100779	90%	85.4%	97.9%
ECO100201	ECO100201	100%	100%	100%
ECO100201	KPN301057	90%	100%	100%
ECO100201	PRT104732	81%	100%	100%
ECO100201	PAE204164	65%	99.3%	97.4%
ECO100201	PPU111521	67%	100%	100%
ECO100201	SPA101642	90%	100%	100%
ECO100201	STY104030	91%	100%	100%
ECO100201	STM103710	92%	100%	100%
ECO100201	YPS002027	75%	100%	100%
ECO100223	BAN108547	31%	33.0%	38.5%
ECO100223	BAN105487	31%	44.4%	80%
ECO100223	ECO100223	100%	100%	100%
ECO100223	VCH100877	26%	64.8%	54.4%
ECO100223	YPS002852	49%	94.3%	84.2%
ECO100236	ABA101495	43%	99.5%	97.9%
ECO100236	BAN105079	42%	96.2%	95.7%
ECO100236	BAN100068	43%	98.6%	98.1%
ECO100236	BFR101900	41%	97.1%	96.9%
ECO100236	BPT102346	44%	99.8%	98.3%
ECO100236	BCE107136	45%	98.3%	89.0%
ECO100236	BMA109567	45%	98.3%	89.7%
ECO100236	CJU100520	38%	97.6%	97.8%
ECO100236	CAC102032	47%	97.8%	96.7%
ECO100236	CDP101216	45%	96.2%	93.5%
ECO100236	EBC103210	88%	100%	100%
ECO100236	EFA200208	46%	99.8%	99.3%
ECO100236	EFM200382	46%	99.5%	99.0%
ECO100236	ECO100236	100%	100%	100%
ECO100236	HIN101211	62%	99.8%	99.8%
ECO100236	KPN302476	86%	100%	100%
ECO100236	LPN100519	40%	98.1%	97.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100236	LMO101153	46%	99.5%	99.0%
ECO100236	MAV103439	48%	96.9%	90.1%
ECO100236	MBV104414	47%	96.6%	93.3%
ECO100236	MLP100899	45%	97.8%	96.8%
ECO100236	MTU202391	47%	96.6%	93.3%
ECO100236	NGO101136	44%	97.8%	97.4%
ECO100236	NME201166	45%	97.8%	97.4%
ECO100236	PMU100936	65%	99.8%	99.0%
ECO100236	PRT105196	71%	99.8%	99.8%
ECO100236	PAE204004	48%	99.5%	97.9%
ECO100236	PPU112135	43%	96.2%	98.5%
ECO100236	PSY105063	45%	99.5%	97.4%
ECO100236	SPA104265	83%	100%	100%
ECO100236	STY104449	86%	100%	100%
ECO100236	STM103861	86%	100%	100%
ECO100236	SMU101435	48%	99.8%	99.3%
ECO100236	SPN400833	46%	97.4%	97.1%
ECO100236	SPY201284	47%	99.5%	99.0%
ECO100236	TPA100346	44%	97.6%	97.9%
ECO100236	VCH102239	58%	99.8%	99.3%
ECO100236	YPS002651	72%	100%	99.5%
ECO100239	BFU102395	50%	89.2%	65.3%
ECO100239	EBC103227	98%	63.9%	100%
ECO100239	ECO102590	81%	90.5%	89.4%
ECO100239	ECO101961	81%	93.7%	100%
ECO100239	ECO100239	100%	100%	100%
ECO100239	LPN103162	46%	66.5%	95.5%
ECO100239	SEP200678	37%	43.7%	65.7%
ECO100240	EBC103228	85%	100%	72.0%
ECO100240	ECO100240	100%	100%	100%
ECO100240	KPN202940	29%	86.8%	94.4%
ECO100240	KPN204064	29%	87.5%	95.7%
ECO100240	KPN200664	29%	86.8%	94.4%
ECO100240	PRT102844	43%	73.7%	100%
ECO100245	EBC103236	92%	99.7%	100%
ECO100245	ECO100245	100%	100%	100%
ECO100245	NME200125	22%	84.0%	81.8%
ECO100255	ABA104682	35%	80.8%	32.0%
ECO100255	ECO100255	100%	100%	100%
ECO100255	HIN100123	69%	83.3%	28.0%
ECO100255	PMU100956	75%	85.8%	25.5%
ECO100255	PRT102521	90%	85.8%	26.2%
ECO100255	VCH103408	81%	85.8%	25%
ECO100256	EBC101194	98%	31.7%	100%
ECO100256	EBC101311	92%	47.3%	98.8%
ECO100256	EBC103715	88%	58.1%	100%
ECO100256	EBC103943	90%	74.9%	100%
ECO100256	EBC104524	90%	74.9%	100%
ECO100256	EBC103604	99%	100%	100%
ECO100256	ECO100266	100%	100%	100%
ECO100256	ECO100256	100%	100%	100%
ECO100256	KPN302635	99%	100%	100%
ECO100256	KPN301602	99%	100%	100%
ECO100256	KPN303307	99%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100256	KPN306562	99%	100%	100%
ECO100256	KPN308721	99%	100%	100%
ECO100256	KPN302324	99%	100%	100%
ECO100256	KPN301774	99%	100%	100%
ECO100256	KPN301257	97%	47.9%	100%
ECO100256	KPN300832	91%	56.3%	100%
ECO100256	KPN302225	100%	65.9%	100%
ECO100256	KPN300593	96%	98.8%	100%
ECO100256	KPN302471	99%	100%	100%
ECO100256	KPN300357	99%	100%	100%
ECO100256	KPN300875	99%	100%	100%
ECO100256	STY100327	99%	100%	100%
ECO100256	STY104877	99%	100%	100%
ECO100256	STY104954	99%	100%	100%
ECO100257	EBC103602	100%	100%	100%
ECO100257	ECO100257	100%	100%	100%
ECO100257	ECO100267	100%	100%	100%
ECO100257	KPN302325	100%	100%	100%
ECO100257	KPN308692	100%	100%	100%
ECO100257	KPN306262	100%	100%	100%
ECO100257	KPN301718	98%	58.2%	89.8%
ECO100257	KPN301773	100%	82.4%	90.4%
ECO100257	KPN305294	95%	100%	100%
ECO100257	KPN302468	100%	100%	100%
ECO100257	KPN300876	100%	100%	100%
ECO100257	KPN301600	100%	100%	100%
ECO100257	KPN303306	100%	100%	100%
ECO100257	KPN302228	100%	100%	100%
ECO100257	NGO100079	32%	81.3%	38.4%
ECO100257	STY100087	100%	100%	100%
ECO100257	STY105122	100%	100%	100%
ECO100257	STY104783	100%	100%	100%
ECO100262	BFR11395	35%	96.3%	98.5%
ECO100262	EBC102936	98%	100%	100%
ECO100262	ECO100262	100%	100%	100%
ECO100262	SPN401706	27%	21.1%	25.4%
ECO100298	BAN105357	48%	100%	100%
ECO100298	BAN100434	51%	100%	99.6%
ECO100298	BFR102281	32%	100%	99.6%
ECO100298	BCE100671	35%	99.6%	91.3%
ECO100298	BFU114123	36%	98.7%	98.3%
ECO100298	BMA102603	37%	98.7%	98.3%
ECO100298	CJU100066	33%	99.2%	95.9%
ECO100298	CDP101095	42%	99.6%	92.7%
ECO100298	EFA201476	44%	98.7%	92.9%
ECO100298	ECO100298	100%	100%	100%
ECO100298	HPY100137	36%	100%	98.8%
ECO100298	NGO101247	35%	99.6%	91.5%
ECO100298	NME201508	35%	99.6%	91.5%
ECO100298	PMU101853	73%	100%	100%
ECO100298	PRT100774	72%	100%	100%
ECO100298	PRT101849	78%	99.6%	97.1%
ECO100315	BCE100919	27%	28.8%	31.5%
ECO100315	EBC101762	85%	99.4%	98.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100315	ECO100315	100%	100%	100%
ECO100350	ECO100350	100%	100%	100%
ECO100361	ABA100700	46%	97.0%	95.2%
ECO100361	BAN101055	43%	93.7%	97.5%
ECO100361	BAN100517	51%	93.1%	95.1%
ECO100361	BPT100922	45%	93.7%	94.7%
ECO100361	BCE101370	45%	93.7%	96.4%
ECO100361	BFU101599	44%	94.9%	97.0%
ECO100361	BMA104829	46%	93.7%	96.4%
ECO100361	CJU100923	51%	94.3%	98.2%
ECO100361	CPN200001	45%	92.8%	94.6%
ECO100361	CTR200001	43%	93.4%	94.9%
ECO100361	CAC102676	49%	94.3%	99.1%
ECO100361	CBO101832	48%	93.4%	96.9%
ECO100361	CDF102168	49%	94.6%	98.5%
ECO100361	CDP100775	49%	94.9%	98.8%
ECO100361	EBC102698	93%	66.9%	100%
ECO100361	ECO100361	100%	100%	100%
ECO100361	HPY100160	51%	94.0%	98.1%
ECO100361	KPN308372	91%	96.7%	100%
ECO100361	LPN101016	50%	93.4%	95.2%
ECO100361	LMO100837	51%	95.2%	98.8%
ECO100361	MCA101135	46%	93.1%	95.2%
ECO100361	MAV107884	48%	93.4%	97.2%
ECO100361	MBV102362	47%	93.4%	96.9%
ECO100361	MLP101436	46%	93.1%	96.0%
ECO100361	MTU200510	47%	93.4%	96.4%
ECO100361	NGO100861	43%	93.4%	94.1%
ECO100361	NME200933	44%	93.4%	94.1%
ECO100361	PMU101692	41%	93.7%	94.1%
ECO100361	PRT102370	77%	95.2%	98.2%
ECO100361	PAE205238	40%	93.7%	94.7%
ECO100361	PPU110651	76%	94.3%	97.5%
ECO100361	PSY101277	42%	94.0%	95.2%
ECO100361	SPA101546	90%	85.4%	99.6%
ECO100361	STY104591	93%	96.7%	100%
ECO100361	SAU801668	49%	92.8%	96.9%
ECO100361	SEP201642	49%	92.8%	96.9%
ECO100361	SHA101765	42%	58.5%	98.0%
ECO100361	VCH100105	44%	93.7%	92.2%
ECO100361	YPS000599	43%	93.7%	94.1%
ECO100362	ECO100362	100%	100%	100%
ECO100366	BFR101178	24%	34.9%	57.0%
ECO100366	CJU100896	19%	55.0%	36.6%
ECO100366	CDP102949	27%	21.6%	9.1%
ECO100366	EBC102756	70%	96.6%	100%
ECO100366	ECO100366	100%	100%	100%
ECO100366	LPN101403	23%	25.9%	39.1%
ECO100366	PRT103239	21%	51.8%	36.1%
ECO100366	SPA101548	89%	70.7%	100%
ECO100366	STY104592	89%	97.0%	47.2%
ECO100366	STM104306	91%	100%	47.8%
ECO100367	EBC102015	28%	77.0%	100%
ECO100367	EBC102758	51%	91.0%	97.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100367	ECO100367	100%	100%	100%
ECO100367	KPN304631	34%	78.8%	100%
ECO100367	SPA101549	68%	98.6%	100%
ECO100367	STY104593	71%	93.2%	100%
ECO100367	STM104307	71%	93.2%	100%
ECO100381	EBC102823	83%	96.8%	96.8%
ECO100381	ECO100381	100%	100%	100%
ECO100381	KPN304881	79%	98.4%	98.4%
ECO100381	STY100328	95%	98.4%	98.4%
ECO100381	STM104352	93%	98.4%	98.4%
ECO100390	ABA100709	34%	73.5%	72.5%
ECO100390	BAN111886	25%	64.5%	73.0%
ECO100390	BAN113193	23%	98.5%	97.9%
ECO100390	BFR11820	28%	96%	99.2%
ECO100390	BPT100403	35%	21.2%	23.5%
ECO100390	BBU100828	26%	82.8%	82.6%
ECO100390	BCE105254	23%	22.8%	24.4%
ECO100390	BFU106002	34%	21.5%	23.4%
ECO100390	CAC100402	26%	84%	85.3%
ECO100390	CBO100412	26%	92.2%	92.2%
ECO100390	CDF103755	25%	89.5%	92.6%
ECO100390	CDP101084	24%	62%	58.7%
ECO100390	EBC101912	81%	99.8%	98.3%
ECO100390	EFA200864	26%	97.2%	97.9%
ECO100390	EFM200128	24%	96%	99.5%
ECO100390	ECO100390	100%	100%	100%
ECO100390	KPN308651	78%	99.8%	99.5%
ECO100390	LMO102080	27%	96.8%	97.6%
ECO100390	MCA101153	32%	95.8%	90.7%
ECO100390	MAV100736	24%	62%	58.2%
ECO100390	MLP100687	27%	21.2%	23.0%
ECO100390	MTU406882	27%	21.2%	30.2%
ECO100390	PRT101271	55%	96.8%	96.3%
ECO100390	PAE204279	31%	92%	91.4%
ECO100390	PPU105701	33%	92%	92.2%
ECO100390	PSY101474	31%	99.8%	99.5%
ECO100390	SPA101178	81%	100%	98.3%
ECO100390	STY100355	83%	100%	100%
ECO100390	SAU801345	23%	97.8%	98.9%
ECO100390	SEP202011	21%	97.8%	98.9%
ECO100390	SHA100866	23%	72.2%	73.8%
ECO100390	SPN201925	26%	16%	16.3%
ECO100390	TPA100619	26%	63.2%	62.9%
ECO100390	VCH103245	28%	72.8%	74.4%
ECO100390	YPS002608	60%	98.8%	96.9%
ECO100394	ABA104913	59%	99.6%	97.2%
ECO100394	BAN112358	49%	94.7%	95.8%
ECO100394	BAN100163	52%	98.2%	97.6%
ECO100394	BCE101232	61%	94.7%	100%
ECO100394	BMA101593	62%	95.2%	96.0%
ECO100394	EBC101456	91%	54.9%	100%
ECO100394	EFA201477	33%	98.7%	98%
ECO100394	ECO100394	100%	100%	100%
ECO100394	KPN304910	93%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100394	MPN100528	22%	71.8%	65.7%
ECO100394	PRT102253	60%	96.9%	97.6%
ECO100394	PAE205092	63%	95.6%	94.2%
ECO100394	PPU106756	60%	93.2%	95.3%
ECO100394	PSY101310	63%	96.9%	97.2%
ECO100394	SPA101112	94%	98.0%	99.6%
ECO100394	STY100389	95%	99.6%	99.8%
ECO100394	STM100031	95%	99.6%	99.8%
ECO100394	YPS002596	81%	98.7%	97.4%
ECO100395	BAN101050	31%	73.1%	70.0%
ECO100395	BAN109230	33%	73.1%	69.8%
ECO100395	BFR12473	26%	64.0%	70.0%
ECO100395	CAC100478	27%	64.1%	82.9%
ECO100395	CDF104139	31%	74.4%	71.2%
ECO100395	EBC101457	84%	79.0%	100%
ECO100395	EFA202423	30%	68.6%	65.8%
ECO100395	EFM200019	29%	82.5%	82.5%
ECO100395	ECO100395	100%	100%	100%
ECO100395	KPN304911	79%	99.5%	99.5%
ECO100395	LMO100614	31%	73.2%	70.7%
ECO100395	SPA105253	92%	4.5%	90%
ECO100395	SPA101113	81%	44.1%	100%
ECO100395	STY100390	83%	99.8%	99.8%
ECO100395	STM100032	83%	99.8%	99.8%
ECO100395	SPN400948	29%	72.9%	70.0%
ECO100395	SPY201005	32%	75.0%	73.0%
ECO100395	YPS002575	57%	99.5%	99.0%
ECO100402	BAN107351	47%	26.1%	35.6%
ECO100402	BFR102271	29%	60.9%	24.5%
ECO100402	EBC103463	93%	100%	100%
ECO100402	ECO100402	100%	100%	100%
ECO100402	KPN301340	90%	100%	97.5%
ECO100402	PRT101447	89%	100%	100%
ECO100402	PPU108585	56%	88.7%	79.7%
ECO100402	PSY105486	56%	88.7%	79.0%
ECO100402	SPA103227	96%	100%	100%
ECO100402	STY100420	96%	100%	100%
ECO100402	STM100071	96%	100%	100%
ECO100402	YPS000205	82%	98.3%	100%
ECO100404	EBC101277	64%	58.8%	100%
ECO100404	ECO100404	100%	100%	100%
ECO100404	KPN303448	70%	88.4%	97.8%
ECO100404	SPA103216	73%	89.9%	100%
ECO100404	STY100423	74%	89.9%	100%
ECO100407	ABA103638	62%	91.7%	91.0%
ECO100407	BAN110020	44%	96.2%	100%
ECO100407	BAN104354	54%	96.2%	97.4%
ECO100407	BFR104554	42%	88.5%	83.5%
ECO100407	BPT100012	39%	94.9%	85.5%
ECO100407	BCE102848	40%	96.2%	84.8%
ECO100407	BFU108808	42%	96.8%	86.9%
ECO100407	BMA102272	41%	93.6%	81.5%
ECO100407	CJU100351	50%	98.7%	100%
ECO100407	CPN200977	27%	98.7%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100407	CTR200105	37%	99.4%	98.7%
ECO100407	CAC100789	52%	98.7%	98.7%
ECO100407	CBO101079	57%	98.7%	99.4%
ECO100407	CDF101258	55%	97.4%	95.6%
ECO100407	CDP100290	42%	94.2%	92.3%
ECO100407	EBC101280	98%	100%	100%
ECO100407	ECO100407	100%	100%	100%
ECO100407	HIN101269	76%	100%	90.2%
ECO100407	HPY100002	50%	99.4%	99.4%
ECO100407	KPN308524	100%	100%	87.2%
ECO100407	LPN100108	43%	90.4%	90.3%
ECO100407	MCA103693	60%	90.4%	85.4%
ECO100407	MAV100814	44%	91.7%	85.9%
ECO100407	MBV102145	44%	91.7%	87.5%
ECO100407	MLP100346	42%	90.4%	88.8%
ECO100407	MTU201397	44%	91.7%	90.9%
ECO100407	NGO100984	45%	96.8%	94.3%
ECO100407	NME200821	44%	96.8%	94.3%
ECO100407	PMU100731	73%	100%	99.4%
ECO100407	PRT100213	83%	99.4%	99.4%
ECO100407	PAE204050	56%	100%	98.1%
ECO100407	PPU104481	57%	100%	98.1%
ECO100407	PSY108754	52%	100%	98.1%
ECO100407	SPA108738	90%	100%	90.2%
ECO100407	STY100427	91%	100%	100%
ECO100407	STM100098	91%	100%	100%
ECO100407	SAU801767	58%	82.7%	96.2%
ECO100407	SEP202131	56%	96.2%	97.4%
ECO100407	SHA101039	58%	94.9%	96.7%
ECO100407	SPN400161	54%	100%	100%
ECO100407	VCH102234	65%	98.7%	89.0%
ECO100407	YPS002509	86%	99.4%	99.4%
ECO100408	ABA101072	44%	97.8%	91.3%
ECO100408	BAN105057	32%	87.8%	93.1%
ECO100408	BAN110216	35%	87.8%	93.1%
ECO100408	BFR105998	27%	62.6%	28.6%
ECO100408	BPT100014	45%	95.0%	88.3%
ECO100408	BBU100107	33%	85.6%	86.2%
ECO100408	BCE111817	43%	97.8%	93.8%
ECO100408	BFU113008	42%	97.1%	93.8%
ECO100408	BMA102557	44%	97.8%	93.8%
ECO100408	CJU100350	34%	89.9%	93.9%
ECO100408	CPN200850	23%	91.4%	78.5%
ECO100408	CTR200214	25%	90.6%	79.3%
ECO100408	CAC103566	31%	87.8%	91.1%
ECO100408	CBO100362	33%	89.2%	97.2%
ECO100408	CDF101805	31%	66.9%	55.6%
ECO100408	CDP100352	32%	91.4%	66.8%
ECO100408	EBC101281	93%	100%	100%
ECO100408	EFA202204	34%	87.8%	81.5%
ECO100408	EFM100580	31%	90.6%	91.3%
ECO100408	ECO100408	100%	100%	100%
ECO100408	HIN101270	54%	95.7%	92.4%
ECO100408	HPY100001	30%	89.9%	90.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100408	KPN308025	94%	100%	100%
ECO100408	LPN101606	40%	93.5%	88.4%
ECO100408	LMO102626	37%	91.4%	96.1%
ECO100408	MCA103036	34%	94.2%	82.3%
ECO100408	MAV101907	36%	87.8%	80.8%
ECO100408	MBV101339	34%	87.8%	43.4%
ECO100408	MLP100320	35%	89.2%	67.4%
ECO100408	MTU202496	34%	87.8%	80.8%
ECO100408	NGO100982	42%	96.4%	95.0%
ECO100408	NME200820	42%	96.4%	95.0%
ECO100408	PMU100730	63%	95.7%	92.4%
ECO100408	PRT103311	74%	74.8%	100%
ECO100408	PAE204049	55%	96.4%	84.3%
ECO100408	PPU111159	53%	96.4%	80.7%
ECO100408	PSY102195	51%	96.4%	81.2%
ECO100408	SPA103662	94%	40.3%	100%
ECO100408	STY100428	96%	100%	100%
ECO100408	STM100099	96%	100%	100%
ECO100408	SAU801524	34%	88.5%	95.3%
ECO100408	SEP200894	35%	88.5%	95.3%
ECO100408	SHA100990	34%	88.5%	96.1%
ECO100408	SMU101206	31%	89.9%	90.2%
ECO100408	SPN400390	34%	89.9%	87.0%
ECO100408	SPY201398	30%	89.9%	88%
ECO100408	TPA101005	35%	90.6%	91.5%
ECO100408	UUR100302	28%	54.0%	59.8%
ECO100408	VCH102233	53%	97.1%	95.5%
ECO100408	YPS002505	84%	99.3%	100%
ECO100409	ABA105144	46%	98.2%	99.3%
ECO100409	BFR11172	30%	97.5%	95.9%
ECO100409	BPT100016	43%	98.2%	93.8%
ECO100409	BCE110120	53%	52%	85%
ECO100409	BFU102731	49%	97.8%	97.3%
ECO100409	BMA107273	44%	96.9%	99.1%
ECO100409	CJU101376	27%	82.5%	88.6%
ECO100409	CDP100279	31%	74.8%	72.3%
ECO100409	EBC101282	84%	99.4%	100%
ECO100409	ECO100409	100%	100%	100%
ECO100409	HIN101271	52%	99.1%	93.9%
ECO100409	KPN303432	84%	99.4%	100%
ECO100409	LPN101227	52%	82.2%	83.3%
ECO100409	MCA103652	39%	91.7%	99.7%
ECO100409	MAV101439	35%	82.8%	82.4%
ECO100409	MBV102049	36%	82.8%	81.4%
ECO100409	MLP101022	35%	81.8%	82.5%
ECO100409	MTU202939	36%	82.8%	81.4%
ECO100409	NGO100695	42%	97.8%	99.1%
ECO100409	NME201944	43%	97.8%	99.1%
ECO100409	PMU100729	53%	99.1%	99.7%
ECO100409	PRT100038	67%	99.1%	98.8%
ECO100409	PAE204048	45%	98.8%	98.8%
ECO100409	PPU104483	45%	98.2%	98.1%
ECO100409	PSY102181	47%	99.1%	99.4%
ECO100409	SPA103660	87%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100409	STY100439	87%	100%	100%
ECO100409	STM100100	88%	100%	100%
ECO100409	VCH102232	54%	99.1%	96.1%
ECO100409	YPS002502	75%	99.7%	98.5%
ECO100424	ABA103655	43%	93.7%	96.9%
ECO100424	BAN111570	28%	72.4%	88.2%
ECO100424	BAN110867	33%	85.1%	92.4%
ECO100424	BPT102774	55%	85.7%	88.8%
ECO100424	BCE104834	59%	78.1%	93.5%
ECO100424	BFU101934	57%	83.2%	93.5%
ECO100424	BMA107732	57%	88.6%	92.6%
ECO100424	BMA109512	56%	89.5%	97.2%
ECO100424	CDP100360	28%	24.8%	21.0%
ECO100424	EBC101217	95%	100%	100%
ECO100424	ECO100424	100%	100%	100%
ECO100424	KPN303418	85%	47.9%	100%
ECO100424	LMO100640	34%	94.0%	81.0%
ECO100424	MAV102952	26%	39.0%	37.5%
ECO100424	MBV101465	22%	42.9%	27.2%
ECO100424	MTU202140	22%	42.9%	25%
ECO100424	PRT103954	67%	98.4%	98.4%
ECO100424	PAE201316	57%	95.2%	90.0%
ECO100424	PPU101498	57%	97.5%	99.7%
ECO100424	PSY104255	56%	96.5%	96.5%
ECO100424	SPA102308	76%	100%	100%
ECO100424	STY100721	95%	100%	99.1%
ECO100424	SAU801061	35%	81.0%	68.0%
ECO100424	SEP200354	38%	81.0%	66.6%
ECO100424	SHA100551	40%	58.4%	59.5%
ECO100424	YPS001897	66%	96.5%	99.7%
ECO100430	ABA101466	71%	93.6%	91.3%
ECO100430	BAN100418	59%	22.6%	96.9%
ECO100430	BAN109620	38%	94.3%	97.8%
ECO100430	BAN107278	65%	68.2%	93.4%
ECO100430	BAN111361	61%	96.5%	96.4%
ECO100430	BFR100135	54%	86.1%	94.8%
ECO100430	BPT100486	71%	100%	93.2%
ECO100430	BBU100611	53%	96.7%	95.8%
ECO100430	BCE114986	74%	97.4%	97.6%
ECO100430	BFU100995	73%	97.4%	97.6%
ECO100430	BMA101609	73%	97.4%	97.6%
ECO100430	CJU100247	55%	94.6%	96.2%
ECO100430	CPN201004	57%	96.0%	98.3%
ECO100430	CTR200078	57%	96.0%	98.3%
ECO100430	CAC101555	61%	96.9%	94.7%
ECO100430	CBO100837	62%	97.4%	93.7%
ECO100430	CDF102979	61%	96.5%	97.8%
ECO100430	CDP101237	61%	96.2%	96.7%
ECO100430	EBC101545	95%	98.3%	100%
ECO100430	EFA202273	60%	95.5%	96.6%
ECO100430	EFM101238	60%	96.5%	97.6%
ECO100430	ECO100430	100%	100%	100%
ECO100430	HIN100694	69%	97.4%	100%
ECO100430	HPY101354	51%	94.3%	97.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100430	KPN301083	98%	100%	100%
ECO100430	LMO102362	62%	96.2%	96.2%
ECO100430	MCA101655	65%	93.4%	97.0%
ECO100430	MAV102304	62%	96.0%	96.0%
ECO100430	MBV101048	61%	96.9%	96.9%
ECO100430	MLP100910	61%	96.2%	96.2%
ECO100430	MTU202421	61%	96.9%	96.9%
ECO100430	NGO101085	69%	94.1%	97.8%
ECO100430	NME201444	69%	94.1%	97.8%
ECO100430	PMU101977	73%	94.6%	98.1%
ECO100430	PRT101501	88%	100%	100%
ECO100430	PAE201801	77%	98.3%	97.9%
ECO100430	PPU109917	77%	98.8%	98.4%
ECO100430	PSY107890	77%	98.3%	97.9%
ECO100430	SPA102998	97%	98.8%	99.8%
ECO100430	STY100725	97%	100%	100%
ECO100430	STM100438	98%	100%	100%
ECO100430	SAU801674	61%	94.1%	94.0%
ECO100430	SEP201649	61%	94.1%	94.0%
ECO100430	SHA100379	56%	44.8%	92.5%
ECO100430	SMU100958	59%	94.1%	96.6%
ECO100430	SPN401426	58%	96.7%	98.8%
ECO100430	SPY200660	59%	94.1%	96.8%
ECO100430	TPA100504	56%	93.6%	95.4%
ECO100430	VCH101891	84%	100%	100%
ECO100430	YPS001881	92%	100%	100%
ECO100431	ABA100033	61%	24.2%	90.3%
ECO100431	ABA105304	55%	97.6%	95.2%
ECO100431	BAN104528	44%	96.9%	99.6%
ECO100431	BAN103992	53%	97.7%	96.3%
ECO100431	BFR11925	45%	97.4%	94.3%
ECO100431	BPT100489	68%	98.2%	95.5%
ECO100431	BBU100612	39%	97.7%	97.3%
ECO100431	BCE108504	69%	98.2%	95.3%
ECO100431	BFU100993	70%	98.5%	95.5%
ECO100431	BMA107557	69%	99.4%	96.6%
ECO100431	CJU100999	39%	97.1%	98.4%
ECO100431	CPN200737	40%	97.8%	95.1%
ECO100431	CTR200613	40%	97.1%	94.6%
ECO100431	CAC100342	47%	97.1%	98.1%
ECO100431	CBO101096	50%	98.0%	99.6%
ECO100431	CDF102998	52%	97.2%	97.3%
ECO100431	EBC101544	98%	54.5%	100%
ECO100431	ECO100431	100%	100%	100%
ECO100431	HIN100442	74%	98.3%	96.3%
ECO100431	HPY101359	39%	97.1%	98.9%
ECO100431	KPN301084	96%	62.6%	100%
ECO100431	MCA100771	52%	98.9%	96.8%
ECO100431	MAV107390	50%	47.6%	95.6%
ECO100431	MLP100403	40%	8.2%	19.4%
ECO100431	MGE100244	41%	96.2%	98.2%
ECO100431	MPN100504	40%	96.2%	98.2%
ECO100431	NGO100249	65%	98.1%	95.5%
ECO100431	NME201277	65%	98.9%	97.0%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100431	PMU101978	75%	99.4%	96.8%
ECO100431	PRT101500	88%	100%	100%
ECO100431	PAE201802	70%	97.8%	96.0%
ECO100431	PPU106533	70%	97.8%	96.0%
ECO100431	PSY103927	69%	97.8%	96.0%
ECO100431	SPA102997	99%	100%	98.4%
ECO100431	STY100726	99%	100%	100%
ECO100431	STM100439	99%	100%	100%
ECO100431	SPN401780	25%	15.9%	41.4%
ECO100431	SPY101613	24%	13.8%	42.9%
ECO100431	TPA100519	43%	98.3%	87.7%
ECO100431	UUR100350	40%	96.7%	99.0%
ECO100431	VCH101890	82%	100%	99.6%
ECO100431	YPS001875	91%	100%	100%
ECO100435	ABA106138	24%	96.2%	84.2%
ECO100435	BFR102134	27%	79.5%	78.4%
ECO100435	BFU104105	26%	95.5%	83.9%
ECO100435	CAC102936	39%	55.3%	54.1%
ECO100435	EBC102273	87%	99.2%	99.2%
ECO100435	ECO100435	100%	100%	100%
ECO100435	KPN302385	85%	98.5%	97.7%
ECO100435	LPN102857	30%	85.6%	83.1%
ECO100435	MCA100454	24%	78.8%	64.6%
ECO100435	MAV107513	22%	97.0%	94.2%
ECO100435	MBV101527	26%	96.2%	92.8%
ECO100435	MTU202439	26%	96.2%	92.8%
ECO100435	NGO101290	40%	96.2%	97.6%
ECO100435	NME200457	40%	96.2%	97.6%
ECO100435	PRT106164	55%	97.0%	94.8%
ECO100435	SPA102993	93%	100%	100%
ECO100435	STY100750	94%	100%	100%
ECO100435	STM100443	94%	100%	100%
ECO100435	SPN401264	26%	75.8%	33.1%
ECO100435	TPA100154	37%	90.2%	88.8%
ECO100435	YPS001867	69%	99.2%	97.0%
ECO100445	BAN103966	24%	61.1%	4.8%
ECO100445	BAN105784	24%	61.1%	43.0%
ECO100445	BMA103371	31%	43.7%	23.7%
ECO100445	CJU101094	30%	44.2%	93.3%
ECO100445	EBC101949	75%	81.6%	98.1%
ECO100445	ECO100445	100%	100%	100%
ECO100445	KPN302393	70%	84.2%	98.8%
ECO100445	MAV100663	25%	55.3%	53.0%
ECO100445	PAE203672	38%	54.2%	77.3%
ECO100445	PPU105141	40%	52.1%	74.2%
ECO100445	PSY107733	35%	53.2%	98.1%
ECO100445	SPA103161	84%	100%	100%
ECO100445	STY100781	88%	100%	100%
ECO100445	STM100473	88%	100%	100%
ECO100445	VCH101045	43%	47.9%	63.6%
ECO100445	YPS001806	55%	87.4%	94.2%
ECO100448	ECO100448	100%	100%	100%
ECO100448	KPN302401	62%	48.5%	100%
ECO100448	PAE202198	27%	94.8%	95.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100448	PPU101997	30%	97.1%	93.8%
ECO100448	SPA103158	77%	49.2%	100%
ECO100448	STY100783	67%	99.2%	99.6%
ECO100453	ABA101792	57%	99.1%	99.3%
ECO100453	BPT100257	67%	98.8%	97.6%
ECO100453	BCE114545	66%	24.5%	84.0%
ECO100453	BCE104032	66%	99.5%	98.6%
ECO100453	BFU105569	65%	100%	98.2%
ECO100453	BMA106830	66%	99.9%	98.2%
ECO100453	EBC103991	92%	100%	100%
ECO100453	ECO100453	100%	100%	100%
ECO100453	HIN100875	32%	97.9%	97.4%
ECO100453	KPN303893	91%	100%	100%
ECO100453	LPN101626	40%	98.9%	99.4%
ECO100453	MCA100461	56%	99.9%	99.7%
ECO100453	MAV103904	24%	18.5%	20.4%
ECO100453	MBV105073	23%	19.9%	19.1%
ECO100453	MTU201501	23%	19.5%	16.7%
ECO100453	NGO100607	48%	99.9%	98.7%
ECO100453	NME201818	49%	99.9%	98.7%
ECO100453	PMU101132	31%	97.6%	97.1%
ECO100453	PRT104879	75%	99.3%	99.2%
ECO100453	PAE200425	70%	98.5%	98.6%
ECO100453	PPU101135	65%	99.0%	98.7%
ECO100453	PSY103933	65%	99.3%	99.5%
ECO100453	STY100789	94%	99.9%	99.9%
ECO100453	YPS001789	84%	99.8%	99.6%
ECO100456	BCE114237	32%	23.7%	57.2%
ECO100456	BFU101219	28%	27.1%	67.2%
ECO100456	CPN200570	19%	22.7%	58.7%
ECO100456	CTR100201	19%	37.5%	48.0%
ECO100456	CDP102443	27%	12.8%	29.9%
ECO100456	EBC103983	84%	97.2%	99.9%
ECO100456	ECO100456	100%	100%	100%
ECO100456	HIN100185	35%	97.2%	98.4%
ECO100456	KPN300148	83%	14.6%	100%
ECO100456	KPN303886	83%	99.7%	97.9%
ECO100456	LPN100506	21%	82.6%	90.8%
ECO100456	MLP100103	19%	19.0%	26.4%
ECO100456	MPN100367	22%	38.7%	9.5%
ECO100456	PMU100358	38%	97.7%	98.5%
ECO100456	PRT105555	48%	97.3%	98.3%
ECO100456	PAE205017	39%	97.1%	97.0%
ECO100456	PPU102036	40%	97.4%	98.5%
ECO100456	PSY103682	41%	94.7%	93.7%
ECO100456	SPA102914	88%	95.2%	100%
ECO100456	STY100812	89%	99.8%	99.8%
ECO100456	STM100504	89%	99.7%	99.7%
ECO100456	UUR100392	24%	13.8%	11.3%
ECO100456	YPS001764	59%	97.4%	96.3%
ECO100457	EBC106191	73%	84.9%	73.8%
ECO100457	ECO100457	100%	100%	100%
ECO100457	KPN303890	75%	84.9%	78.9%
ECO100457	PRT105806	58%	94.3%	94.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100457	SPA102916	80%	92.5%	92.7%
ECO100457	STY100814	80%	92.5%	92.7%
ECO100457	VCH101828	58%	81.1%	61.4%
ECO100457	YPS003930	57%	84.9%	88.2%
ECO100458	CDP100984	27%	56%	24.8%
ECO100458	EBC103989	56%	100%	100%
ECO100458	ECO100458	100%	100%	100%
ECO100458	KPN300488	55%	92%	100%
ECO100458	KPN303892	59%	100%	100%
ECO100458	PMU100990	20%	97.1%	95.1%
ECO100458	PRT104644	35%	98.3%	97.2%
ECO100458	PAE108407	28%	88.6%	23.8%
ECO100458	SPA102917	72%	97.7%	100%
ECO100458	VCH101827	32%	81.1%	79.1%
ECO100458	YPS001761	36%	98.3%	97.2%
ECO100464	ABA105152	52%	99.7%	99.4%
ECO100464	BFR105086	32%	90.2%	82.4%
ECO100464	BPT101320	59%	99.2%	98.1%
ECO100464	BBU100559	41%	98.4%	93.4%
ECO100464	BCE101760	60%	99.4%	99.1%
ECO100464	BFU107645	61%	99.5%	98.9%
ECO100464	BMA108677	61%	98.7%	99.2%
ECO100464	CJU100481	43%	98.4%	98.8%
ECO100464	CAC101040	39%	98.4%	99.0%
ECO100464	CBO103036	41%	42.6%	99.6%
ECO100464	CDF102736	29%	96.0%	95.7%
ECO100464	EBC103981	91%	100%	100%
ECO100464	ECO100464	100%	100%	100%
ECO100464	HIN100103	75%	99.5%	98.7%
ECO100464	HPY100206	45%	98.6%	98.4%
ECO100464	KPN303864	91%	100%	100%
ECO100464	LPN102583	62%	99.5%	99.2%
ECO100464	LMO102556	23%	98.6%	98.2%
ECO100464	MCA100562	50%	98.6%	98.6%
ECO100464	MAV101501	48%	97.1%	96.7%
ECO100464	MBV105727	45%	98.4%	98.0%
ECO100464	MLP100990	45%	98.4%	98.0%
ECO100464	MTU202265	45%	98.4%	98.0%
ECO100464	NGO100474	25%	19.9%	34.3%
ECO100464	NME200399	25%	19.9%	18.6%
ECO100464	PMU101024	76%	99.2%	98.4%
ECO100464	PRT105522	81%	99.7%	99.0%
ECO100464	PAE201595	61%	99.4%	98.4%
ECO100464	PPU101233	60%	99.4%	98.7%
ECO100464	PSY105027	60%	99.4%	98.7%
ECO100464	SPA100495	91%	91.7%	99.7%
ECO100464	STY100841	94%	100%	98.7%
ECO100464	STM100533	94%	100%	98.7%
ECO100464	TPA100974	41%	98.4%	98.7%
ECO100464	VCH100968	69%	99.2%	98.1%
ECO100464	YPS001737	86%	100%	99.7%
ECO100465	ABA102578	62%	99.5%	99.1%
ECO100465	BAN108855	43%	100%	98.6%
ECO100465	BAN106781	47%	100%	98.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100465	BFR10586	39%	98.6%	96.8%
ECO100465	BPT101280	60%	99.5%	99.1%
ECO100465	BBU100416	35%	99.5%	98.1%
ECO100465	BCE114693	65%	96.3%	96.4%
ECO100465	BFU106856	65%	96.3%	96.4%
ECO100465	BMA102106	65%	96.7%	96.8%
ECO100465	CJU100600	25%	98.1%	94.3%
ECO100465	CPN200508	34%	83.6%	83.6%
ECO100465	CTR200398	32%	94.9%	83.0%
ECO100465	CAC102891	48%	100%	99.1%
ECO100465	CBO103787	51%	100%	98.6%
ECO100465	CDF102350	52%	100%	96.4%
ECO100465	CDP100003	40%	86.4%	87.3%
ECO100465	EBC103984	96%	100%	100%
ECO100465	EFA201978	45%	99.5%	98.6%
ECO100465	EFM200623	45%	99.5%	99.1%
ECO100465	ECO100465	100%	100%	100%
ECO100465	HIN100331	71%	100%	100%
ECO100465	HPY100611	30%	61.2%	72.3%
ECO100465	KPN303865	96%	100%	100%
ECO100465	LPN102084	55%	99.5%	99.1%
ECO100465	LMO102187	46%	99.5%	98.6%
ECO100465	MCA101231	61%	99.5%	98.6%
ECO100465	MAV102071	38%	100%	99.4%
ECO100465	MBV101628	37%	100%	99.4%
ECO100465	MLP101114	39%	86.4%	87.3%
ECO100465	MTU200730	37%	100%	99.4%
ECO100465	MGE100174	34%	84.6%	84.6%
ECO100465	MPN100646	32%	86.0%	86.5%
ECO100465	NGO100911	62%	100%	99.5%
ECO100465	NME200954	64%	100%	99.5%
ECO100465	PMU100284	71%	99.5%	99.5%
ECO100465	PRT104973	81%	100%	100%
ECO100465	PAE203684	64%	96.7%	96.7%
ECO100465	PPU107935	64%	96.7%	96.8%
ECO100465	PSY104919	60%	81.3%	96.2%
ECO100465	SPA100230	92%	100%	91.8%
ECO100465	STY100842	96%	100%	100%
ECO100465	STM100555	96%	100%	100%
ECO100465	SAU802229	47%	99.5%	98.6%
ECO100465	SEP200243	47%	99.5%	98.6%
ECO100465	SHA100179	47%	99.5%	98.1%
ECO100465	SMU100597	43%	85.0%	85.8%
ECO100465	SPN400210	38%	99.5%	98.1%
ECO100465	SPY200058	40%	99.5%	98.1%
ECO100465	TPA100588	38%	98.6%	97.2%
ECO100465	UUR100253	33%	99.5%	98.1%
ECO100465	VCH100969	73%	99.5%	99.5%
ECO100465	YPS001716	87%	100%	100%
ECO100468	ABA104316	27%	50.7%	63.8%
ECO100468	EBC103990	93%	100%	100%
ECO100468	ECO100468	100%	100%	100%
ECO100468	KPN303867	89%	100%	100%
ECO100468	MCA101546	24%	57.4%	72.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100468	PRT103854	82%	100%	100%
ECO100468	SPA107646	92%	100%	100%
ECO100468	STY100845	94%	100%	100%
ECO100468	STM100558	94%	100%	100%
ECO100468	VCH103521	69%	100%	100%
ECO100468	VCH101110	75%	100%	100%
ECO100468	YPS001600	83%	100%	100%
ECO100469	ABA105707	48%	97.3%	97.0%
ECO100469	BAN105697	24%	61.3%	85.4%
ECO100469	BAN103529	27%	63.6%	89.8%
ECO100469	BAN105257	27%	67.6%	93.7%
ECO100469	BFR10916	30%	63.8%	48.5%
ECO100469	BFR11614	32%	69.9%	50.9%
ECO100469	BBU100446	21%	69.4%	57.9%
ECO100469	BCE111018	51%	97.7%	97.5%
ECO100469	BMA106790	50%	99.3%	98.4%
ECO100469	CBO103826	23%	65.9%	91.1%
ECO100469	CDP101177	26%	90.1%	93.7%
ECO100469	EBC105058	92%	98.2%	98.4%
ECO100469	EFM201852	28%	67.9%	96.1%
ECO100469	ECO100469	100%	100%	100%
ECO100469	KPN309208	91%	100%	100%
ECO100469	MAV102680	29%	64.9%	93.2%
ECO100469	MBV104698	29%	61.5%	86.2%
ECO100469	MLP100477	27%	61.5%	86.5%
ECO100469	MTU203193	29%	61.5%	86.2%
ECO100469	PRT101586	71%	98.0%	95.4%
ECO100469	PAE205513	62%	98.0%	97.0%
ECO100469	PPU103619	33%	68.3%	64.0%
ECO100469	SPA103965	83%	98.2%	100%
ECO100469	STY100846	94%	99.6%	99.6%
ECO100469	SAU401722	23%	66.8%	85.2%
ECO100469	TPA100056	23%	37.6%	47.1%
ECO100469	YPS001597	79%	98.2%	97.3%
ECO100473	BCE112818	22%	90.5%	79.4%
ECO100473	BFU105062	27%	87.5%	92.5%
ECO100473	BMA109015	23%	55.7%	93.1%
ECO100473	CAC101805	21%	87.1%	80.6%
ECO100473	EBC101032	70%	51.1%	100%
ECO100473	ECO100473	100%	100%	100%
ECO100473	KPN305997	67%	96.2%	99.2%
ECO100473	PRT105875	47%	99.2%	97.8%
ECO100473	SPA101218	64%	100%	100%
ECO100473	STY100870	65%	100%	100%
ECO100473	VCH102186	33%	88.6%	80.2%
ECO100473	YPS001582	56%	99.2%	97.4%
ECO100475	ABA101879	41%	7.2%	16.0%
ECO100475	BAN105978	44%	57.4%	98.6%
ECO100475	BAN110321	44%	69.3%	100%
ECO100475	BFR10291	39%	86.6%	98.1%
ECO100475	BPT102136	41%	6.8%	15.8%
ECO100475	BCE110602	43%	73.5%	97.9%
ECO100475	BFU113139	47%	72.8%	81.7%
ECO100475	BMA106854	46%	73.3%	73.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100475	CJU101080	30%	86.9%	89.4%
ECO100475	CAC100879	39%	18.9%	7.9%
ECO100475	CBO102754	38%	99.2%	99.5%
ECO100475	CDF102644	39%	4.6%	16.2%
ECO100475	CDP100778	38%	5.2%	7.9%
ECO100475	EBC100331	89%	4.2%	19.6%
ECO100475	EFA201855	39%	19.2%	7.9%
ECO100475	EFM201092	37%	87.5%	98.5%
ECO100475	ECO100475	100%	100%	100%
ECO100475	HIN100276	37%	3.2%	10.7%
ECO100475	HPY101055	32%	88.0%	99.6%
ECO100475	KPN308679	87%	6.6%	18.6%
ECO100475	LPN101141	44%	77.7%	89.0%
ECO100475	LPN101253	45%	77.7%	88.7%
ECO100475	LMO100878	37%	1.4%	12.6%
ECO100475	MCA100406	36%	87.5%	95.5%
ECO100475	MAV100988	36%	72.9%	81.5%
ECO100475	MBV103852	44%	77.7%	79.7%
ECO100475	MLP101222	34%	87.4%	96.5%
ECO100475	MTU200960	44%	77.7%	81.9%
ECO100475	NGO100160	39%	86.7%	98.1%
ECO100475	NME201398	40%	87.2%	98.6%
ECO100475	PMU101892	39%	2.9%	10.9%
ECO100475	PRT105140	72%	27.5%	12.7%
ECO100475	PAE203917	41%	7.1%	16.3%
ECO100475	PPU108258	41%	99.6%	98.6%
ECO100475	PSY102170	42%	7.0%	21.1%
ECO100475	SPA101217	84%	86.8%	100%
ECO100475	STY100871	93%	99.9%	99.9%
ECO100475	STM104228	42%	4.4%	8.3%
ECO100475	SAU802557	38%	99.9%	99.5%
ECO100475	SEP201193	37%	7.2%	16.6%
ECO100475	SHA100292	40%	73.9%	100%
ECO100475	SMU100795	41%	4.4%	8.9%
ECO100475	SPN400641	43%	72.1%	79.3%
ECO100475	SPY201317	41%	4.6%	8.9%
ECO100475	TPA101026	34%	3.7%	9.8%
ECO100475	UUR100203	28%	76.9%	92.9%
ECO100475	VCH102181	50%	9.0%	19.3%
ECO100475	YPS001578	66%	7.3%	22.9%
ECO100485	ABA102979	44%	78.8%	90.3%
ECO100485	BPT100402	42%	86.5%	82.4%
ECO100485	BCE103660	39%	98.1%	60.3%
ECO100485	BFU101347	38%	93.3%	90.2%
ECO100485	BMA107037	42%	86.1%	81.2%
ECO100485	CAC101080	25%	84.1%	98.9%
ECO100485	CBO103052	27%	48.6%	52.1%
ECO100485	CDF104317	23%	79.3%	92.3%
ECO100485	EBC103361	92%	90.9%	100%
ECO100485	EFA202370	25%	74.0%	85.1%
ECO100485	ECO100485	100%	100%	100%
ECO100485	KPN303861	87%	100%	95.4%
ECO100485	LMO100084	26%	80.3%	96.4%
ECO100485	NGO100490	35%	75.5%	71.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100485	NME201781	35%	75.5%	71.8%
ECO100485	PRT104443	57%	89.4%	97.9%
ECO100485	PAE202854	49%	91.3%	95.5%
ECO100485	PPU111360	45%	93.8%	91.2%
ECO100485	PSY100343	47%	75%	98.8%
ECO100485	SPA101077	87%	98.1%	94.9%
ECO100485	STY100879	89%	98.1%	100%
ECO100485	SPY201146	27%	84.1%	55.6%
ECO100485	VCH103503	56%	90.9%	88.8%
ECO100485	YPS001527	71%	98.1%	98.1%
ECO100488	ABA100225	26%	47.2%	31.6%
ECO100488	ABA100477	26%	27.1%	80.5%
ECO100488	BAN104847	21%	28.1%	4.3%
ECO100488	BAN109223	31%	7.2%	48.7%
ECO100488	BAN101440	31%	7.6%	43.5%
ECO100488	BAN110288	23%	20.8%	3.8%
ECO100488	BFR104422	59%	1.9%	27%
ECO100488	BCE108121	26%	28.9%	68.0%
ECO100488	BCE104951	26%	49.5%	30.5%
ECO100488	BFU107935	29%	21.0%	31.4%
ECO100488	BFU100092	51%	6.2%	98.9%
ECO100488	BFU100109	28%	9.3%	60.6%
ECO100488	BFU102581	29%	11.2%	4.4%
ECO100488	BMA107682	26%	25.9%	53.9%
ECO100488	CAC100404	28%	7.9%	39.1%
ECO100488	EBC107494	33%	21.5%	50.7%
ECO100488	EBC103412	28%	21.5%	25.6%
ECO100488	EBC104888	26%	28.5%	68.9%
ECO100488	ECO100686	77%	23.5%	70.2%
ECO100488	ECO101427	86%	41.4%	86.8%
ECO100488	ECO100683	77%	88.2%	89.3%
ECO100488	ECO103515	77%	88.2%	90.6%
ECO100488	ECO103405	74%	99.6%	99.7%
ECO100488	ECO100488	100%	100%	100%
ECO100488	MAV107400	23%	19.1%	20.6%
ECO100488	PRT103688	29%	7.3%	73.6%
ECO100488	PRT103361	31%	7.6%	75.1%
ECO100488	PRT103421	25%	11.2%	4.4%
ECO100488	PAE202682	31%	88.3%	88.8%
ECO100488	PPU107712	30%	7.6%	94.3%
ECO100488	PPU109654	27%	6.8%	73.5%
ECO100488	PPU110484	28%	12.0%	92.3%
ECO100488	PPU107101	28%	10.9%	38.6%
ECO100488	PPU109653	28%	41.0%	73.7%
ECO100488	PPU109652	25%	32.9%	38.8%
ECO100488	PPU110482	29%	53.6%	54.8%
ECO100488	PSY108533	33%	4.9%	83.6%
ECO100488	PSY101322	55%	4.1%	24.3%
ECO100488	PSY105816	47%	7.2%	45.3%
ECO100488	PSY102083	25%	44.4%	45.2%
ECO100488	SPA106438	38%	2.5%	16.8%
ECO100488	SPA100247	26%	53.2%	67.7%
ECO100488	STY104094	26%	30.2%	50.1%
ECO100488	STY104095	30%	59.5%	51.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100488	STM103807	42%	8.0%	50.8%
ECO100488	STM103806	26%	40.7%	49.6%
ECO100488	YPS002860	25%	84.9%	75.6%
ECO100490	ABA100225	43%	36.9%	5.8%
ECO100490	ABA100477	45%	38.6%	10.5%
ECO100490	BAN101440	31%	39.4%	37.8%
ECO100490	BAN109223	31%	39.4%	44.2%
ECO100490	BAN110288	33%	39.4%	4.4%
ECO100490	BCE104951	36%	50.4%	8.6%
ECO100490	BCE108121	46%	39.0%	10.1%
ECO100490	BFU100092	48%	36.9%	97.8%
ECO100490	BFU102581	51%	39.0%	6.1%
ECO100490	BFU100109	47%	41.1%	14.2%
ECO100490	BMA107682	35%	38.6%	8.0%
ECO100490	CAC100404	32%	35.6%	30.3%
ECO100490	EBC103412	43%	38.1%	33.2%
ECO100490	ECO100686	73%	39.8%	19.7%
ECO100490	ECO103517	66%	45.8%	45.5%
ECO100490	ECO103515	75%	39.4%	6.8%
ECO100490	ECO103405	76%	39.8%	6.7%
ECO100490	ECO100683	76%	39.4%	6.7%
ECO100490	ECO100488	80%	39.4%	6.5%
ECO100490	ECO101427	42%	92.4%	31.4%
ECO100490	ECO100490	100%	100%	100%
ECO100490	PRT103361	33%	38.6%	65.5%
ECO100490	PRT103421	45%	39.4%	7.7%
ECO100490	PAE202682	51%	39.4%	7.0%
ECO100490	PPU107712	49%	23.3%	63.2%
ECO100490	PPU107101	48%	38.6%	22.0%
ECO100490	PPU110482	46%	39.0%	6.6%
ECO100490	PPU109652	45%	40.7%	6.4%
ECO100490	PSY101322	55%	24.6%	23.9%
ECO100490	PSY105816	46%	39.0%	40.8%
ECO100490	PSY102083	47%	39.0%	5.8%
ECO100490	SPA106438	46%	37.3%	40%
ECO100490	STY104095	48%	38.6%	10.8%
ECO100490	STY104094	51%	37.3%	6.6%
ECO100490	STM103806	49%	37.7%	6.7%
ECO100490	STM103807	49%	37.7%	37.0%
ECO100490	YPS002860	47%	39.4%	6.4%
ECO100491	ECO100491	100%	100%	100%
ECO100499	ABA104957	38%	99.6%	97.3%
ECO100499	BCE100249	55%	98.4%	94.4%
ECO100499	BFU102476	53%	98.4%	95.1%
ECO100499	BFU114367	56%	98.4%	94.4%
ECO100499	ECO100499	100%	100%	100%
ECO100499	PAE201500	59%	98.4%	97.7%
ECO100499	PPU107167	57%	98.4%	97.7%
ECO100499	SPA103879	83%	100%	100%
ECO100499	STY100931	84%	100%	100%
ECO100499	STM100624	84%	100%	100%
ECO100500	ABA103985	44%	98.6%	99.0%
ECO100500	BPT100453	34%	93.5%	99.3%
ECO100500	BCE106184	65%	99.0%	97.0%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100500	BFU104727	64%	99.7%	96.0%
ECO100500	EFA200236	38%	95.9%	94.9%
ECO100500	EFM201855	40%	96.2%	95.6%
ECO100500	ECO100500	100%	100%	100%
ECO100500	HPY200581	30%	97.3%	98.6%
ECO100500	LMO101779	41%	95.9%	98.3%
ECO100500	PAE201499	62%	99.3%	98.3%
ECO100500	PPU100008	63%	99.3%	98.0%
ECO100500	SPA103880	90%	100%	100%
ECO100500	STY100932	91%	100%	100%
ECO100500	STM100645	91%	100%	100%
ECO100501	ECO100501	100%	100%	100%
ECO100501	STM104546	57%	53.3%	58.3%
ECO100502	ABA104757	29%	99.3%	89.2%
ECO100502	BCE108546	28%	98.2%	82.9%
ECO100502	BFU103203	26%	96.3%	79.2%
ECO100502	BMA100176	27%	96.3%	79.2%
ECO100502	EBC101321	30%	36.8%	93.7%
ECO100502	EFA202073	53%	97.9%	86.5%
ECO100502	ECO100502	100%	100%	100%
ECO100502	KPN301121	28%	96.8%	84.7%
ECO100502	PAE200475	30%	98.2%	74.4%
ECO100502	PPU107187	28%	96.3%	78.9%
ECO100502	PSY103157	26%	95.4%	85.9%
ECO100502	SPA103881	91%	100%	90.3%
ECO100502	STM100647	92%	100%	100%
ECO100502	YPS002040	27%	96.8%	85.4%
ECO100522	EBC104095	61%	93.5%	100%
ECO100522	ECO100522	100%	100%	100%
ECO100522	LPN101710	27%	35.2%	30.8%
ECO100522	PRT104641	26%	77.4%	75.5%
ECO100522	PRT103064	29%	92.2%	95.5%
ECO100522	PRT105670	29%	98.3%	97.8%
ECO100522	PRT105544	30%	95.7%	98.6%
ECO100522	PRT105082	33%	93.5%	95.9%
ECO100522	PRT101027	42%	97.0%	96.9%
ECO100522	PRT101728	46%	96.1%	94.0%
ECO100522	PRT105207	46%	93.0%	93.0%
ECO100522	SPA101492	64%	96.5%	93.7%
ECO100522	STY101296	62%	99.6%	99.6%
ECO100522	STM101010	61%	99.6%	99.6%
ECO100523	BBU100344	26%	17.1%	36.2%
ECO100523	BMA102682	37%	95.0%	95.5%
ECO100523	CDF100539	22%	18.0%	56.5%
ECO100523	EBC104108	65%	95.6%	99.3%
ECO100523	ECO100523	100%	100%	100%
ECO100523	KPN201537	39%	95.8%	98.7%
ECO100523	MAV108170	24%	20.3%	37.6%
ECO100523	PRT104636	44%	97.5%	99.3%
ECO100523	SPA103196	72%	68.5%	100%
ECO100523	STY101297	69%	98.6%	98.5%
ECO100523	STM101011	70%	98.6%	98.5%
ECO100523	SAU300377	26%	11.5%	52.7%
ECO100541	EBC101703	52%	98.4%	95.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100541	ECO100541	100%	100%	100%
ECO100541	PRT105258	53%	48.8%	98.4%
ECO100541	PRT100296	49%	96.9%	93.2%
ECO100541	YPS000017	65%	94.5%	93.0%
ECO100549	ECO100549	100%	100%	100%
ECO100554	ABA101274	33%	40.6%	26.5%
ECO100554	ABA101204	39%	31.7%	23.0%
ECO100554	ABA104217	29%	37.8%	27.6%
ECO100554	BFR101004	32%	28.9%	11.4%
ECO100554	BFR105341	35%	31.3%	13.8%
ECO100554	BCE106065	29%	29.7%	67.3%
ECO100554	BCE113842	31%	49.8%	33.2%
ECO100554	BMA107995	26%	31.3%	22.3%
ECO100554	BMA105539	32%	31.7%	38.9%
ECO100554	ECO101470	28%	92.4%	89.7%
ECO100554	ECO103438	36%	93.6%	96.3%
ECO100554	ECO100554	100%	100%	100%
ECO100554	LPN103151	28%	32.9%	24.5%
ECO100554	MBV100183	26%	55.4%	37.6%
ECO100554	MTU301482	26%	55.4%	36.9%
ECO100554	NME102614	33%	29.7%	24.6%
ECO100554	PRT101349	35%	39.8%	39.5%
ECO100554	PRT104740	34%	51.8%	48.0%
ECO100554	PAE202094	29%	33.3%	25%
ECO100554	PAE203213	31%	30.5%	22.6%
ECO100554	PPU102277	25%	37.8%	26.4%
ECO100554	PPU101064	31%	30.5%	21.5%
ECO100554	SPA100934	36%	50.6%	51.4%
ECO100554	SPA103838	40%	49.8%	40.1%
ECO100554	STY102368	37%	49.0%	48.6%
ECO100554	STY102403	33%	73.9%	64.9%
ECO100554	STM103734	40%	49.8%	40.1%
ECO100554	SMU100002	29%	37.8%	27.9%
ECO100554	VCH100823	29%	49.0%	44.2%
ECO100555	BFU112796	28%	18.3%	36.0%
ECO100555	EBC102973	48%	100%	97.1%
ECO100555	ECO100555	100%	100%	100%
ECO100555	LPN101913	38%	97.8%	98.7%
ECO100555	PPU103428	23%	56.8%	38.8%
ECO100555	SPA103146	46%	100%	100%
ECO100555	STY101101	46%	100%	100%
ECO100555	YPS000286	40%	91.5%	90.4%
ECO100557	ABA102872	22%	69.9%	59.8%
ECO100557	ECO100557	100%	100%	100%
ECO100557	PPU111671	33%	99.3%	98.9%
ECO100557	PSY102041	25%	73.3%	70.7%
ECO100560	BAN106854	24%	24.4%	90.1%
ECO100560	BAN112348	33%	23.8%	76.5%
ECO100560	BAN100221	25%	74.8%	77.7%
ECO100560	BAN103717	26%	62.5%	96.9%
ECO100560	BAN100334	26%	57.1%	93.3%
ECO100560	BAN102939	26%	74.8%	76.4%
ECO100560	BAN113334	25%	63.5%	84.6%
ECO100560	BAN102333	27%	68.8%	71.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100560	BAN110951	28%	62.5%	67.8%
ECO100560	BFR10765	27%	59.6%	63.9%
ECO100560	BFR103543	27%	64.0%	68.4%
ECO100560	BPT104047	31%	97.9%	96.7%
ECO100560	BCE114206	31%	97.9%	97.4%
ECO100560	BFU111283	42%	61.7%	63.6%
ECO100560	BFU103037	32%	97.7%	98.6%
ECO100560	BMA100332	31%	98.3%	98.1%
ECO100560	CAC102666	28%	60.6%	62.2%
ECO100560	CDF100992	28%	52.7%	65.7%
ECO100560	EBC104519	56%	99.8%	97.8%
ECO100560	ECO100560	100%	100%	100%
ECO100560	KPN302405	66%	98.5%	98.3%
ECO100560	LPN102226	32%	63.3%	88.0%
ECO100560	LMO102551	24%	99.8%	98.6%
ECO100560	PAE202808	41%	68.3%	72.7%
ECO100560	PPU101821	35%	97.7%	98.4%
ECO100560	PPU101984	35%	97.9%	96.4%
ECO100560	PSY104285	40%	67.3%	70.9%
ECO100560	SAU801414	23%	95%	96.5%
ECO100560	YPS003206	35%	67.1%	69.3%
ECO100572	ECO100572	100%	100%	100%
ECO100572	ECO100016	100%	100%	100%
ECO100572	ECO102351	100%	100%	99.5%
ECO100572	KPN301837	28%	24.6%	33.5%
ECO100572	KPN301756	28%	24.6%	25.9%
ECO100572	PPU112458	31%	21.6%	17.3%
ECO100572	PPU110183	31%	21.6%	18.0%
ECO100572	PPU100534	31%	21.6%	17.3%
ECO100572	PPU111918	31%	21.6%	17.3%
ECO100572	PPU111424	31%	21.6%	17.3%
ECO100572	PPU109580	31%	21.6%	17.3%
ECO100572	STY100108	28%	24.6%	25.9%
ECO100582	BAN107042	36%	24.8%	26.5%
ECO100582	BAN100797	25%	61.9%	58.9%
ECO100582	BAN107954	22%	56.0%	61.5%
ECO100582	BAN107919	23%	84.3%	79.6%
ECO100582	CAC102393	22%	47.5%	43.3%
ECO100582	CDF102033	25%	37.7%	36.8%
ECO100582	EBC100468	78%	74.8%	100%
ECO100582	EFA205322	25%	90.6%	88.1%
ECO100582	ECO100582	100%	100%	100%
ECO100582	KPN304825	84%	96.2%	96.2%
ECO100582	PRT102496	24%	69.8%	63.2%
ECO100582	PAE204156	41%	97.8%	98.0%
ECO100582	SPA102125	76%	100%	100%
ECO100582	STY101372	79%	100%	100%
ECO100582	SHA100136	24%	88.4%	86.1%
ECO100582	SPY200281	22%	81.4%	76.5%
ECO100582	VCH100763	36%	96.5%	92%
ECO100582	YPS002778	53%	92.1%	86.9%
ECO100584	ABA103671	56%	98.5%	98.7%
ECO100584	BAN111652	41%	98.7%	99.8%
ECO100584	BAN104146	48%	98.7%	98.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100584	BCE105183	43%	65.1%	93.5%
ECO100584	EBC100728	73%	81.9%	100%
ECO100584	ECO100584	100%	100%	100%
ECO100584	KPN304829	81%	98.7%	98.9%
ECO100584	MAV100968	42%	98.7%	96.7%
ECO100584	MBV101299	37%	97.4%	95.3%
ECO100584	MTU202348	39%	97.4%	93.6%
ECO100584	PAE204226	46%	98.7%	96.7%
ECO100584	PSY105284	42%	90.7%	92.5%
ECO100584	SPA100882	82%	99.6%	100%
ECO100584	STY101374	85%	99.6%	99.4%
ECO100584	STM101106	86%	99.6%	99.6%
ECO100584	VCH100759	48%	98.5%	98.0%
ECO100584	YPS002354	42%	93.7%	95.0%
ECO100593	EBC102628	50%	99%	99.3%
ECO100593	ECO100593	100%	100%	100%
ECO100593	KPN303370	48%	97.7%	94.2%
ECO100593	SPA103039	53%	99.3%	99.3%
ECO100593	STY101394	54%	99.3%	99.3%
ECO100619	EBC101386	61%	100%	83.9%
ECO100619	ECO100619	100%	100%	100%
ECO100619	KPN302688	50%	100%	89.3%
ECO100619	SPA102530	61%	100%	100%
ECO100619	STY101451	68%	100%	83.9%
ECO100632	ABA105508	56%	99.5%	99.1%
ECO100632	BAN102826	43%	99.3%	99.5%
ECO100632	BFR10298	34%	99.5%	99.9%
ECO100632	BPT102350	48%	99.8%	99.9%
ECO100632	BBU100250	38%	99.5%	99.6%
ECO100632	BCE103321	49%	99.9%	100%
ECO100632	BMA109061	49%	99.9%	94.6%
ECO100632	CJU101017	43%	99.4%	99.6%
ECO100632	CPN200606	41%	99.5%	99.9%
ECO100632	CTR200474	40%	99.5%	99.9%
ECO100632	CAC101070	40%	99.0%	99.1%
ECO100632	CBO100961	40%	98.8%	99.0%
ECO100632	CDF103555	44%	99.4%	99.5%
ECO100632	CDP101454	36%	99.0%	97.1%
ECO100632	EBC100539	92%	55.2%	100%
ECO100632	EFA200538	42%	99.3%	99.5%
ECO100632	EFM200610	43%	99.3%	99.5%
ECO100632	ECO100632	100%	100%	100%
ECO100632	HIN100900	72%	99.9%	99.8%
ECO100632	HPY101524	42%	98.8%	99.3%
ECO100632	KPN300581	97%	18.4%	96.3%
ECO100632	KPN302684	95%	99.8%	100%
ECO100632	LPN103327	54%	100%	100%
ECO100632	LMO100611	42%	99.3%	99.5%
ECO100632	MCA102972	49%	99.7%	99.0%
ECO100632	MAV103767	37%	96.3%	90.9%
ECO100632	MBV104696	37%	96.2%	92.8%
ECO100632	MLP100028	36%	99.9%	97.7%
ECO100632	MTU200041	37%	96.2%	93.0%
ECO100632	MGE100272	34%	99.4%	99.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100632	MPN100453	34%	99.4%	99.5%
ECO100632	NGO100059	57%	99.9%	99.8%
ECO100632	NME200518	55%	99.9%	100%
ECO100632	PMU101214	72%	99.8%	99.8%
ECO100632	PRT102887	80%	100%	100%
ECO100632	PAE203984	57%	99.8%	99.8%
ECO100632	PPU108817	57%	99.8%	99.8%
ECO100632	PSY105072	57%	99.8%	99.8%
ECO100632	SPA100430	93%	58.6%	98.8%
ECO100632	STY101466	95%	100%	100%
ECO100632	SAU801760	42%	99.3%	99.5%
ECO100632	SEP202121	42%	99.3%	99.5%
ECO100632	SHA100631	42%	99.3%	99.5%
ECO100632	SMU100492	40%	99.4%	99.5%
ECO100632	SPN400235	42%	99.4%	99.5%
ECO100632	SPY200128	42%	99.4%	99.5%
ECO100632	TPA100579	39%	98.8%	99.2%
ECO100632	UUR100373	34%	99.4%	99.9%
ECO100632	VCH100940	75%	99.8%	95.7%
ECO100632	YPS001199	84%	100%	100%
ECO100645	ABA101420	41%	99.0%	100%
ECO100645	BPT102527	46%	98.3%	96.7%
ECO100645	BCE104111	65%	100%	99%
ECO100645	BFU109692	45%	99.0%	85.4%
ECO100645	BMA102165	72%	86.8%	100%
ECO100645	EBC102933	91%	100%	100%
ECO100645	ECO100645	100%	100%	100%
ECO100645	KPN300407	91%	41.7%	100%
ECO100645	KPN302708	89%	100%	100%
ECO100645	PRT102877	75%	100%	100%
ECO100645	PAE201341	58%	97.4%	97.7%
ECO100645	PPU101496	57%	96.4%	97.4%
ECO100645	PSY105194	55%	96.4%	94.8%
ECO100645	SPA102587	95%	92.1%	100%
ECO100645	STY101796	93%	100%	98.1%
ECO100645	YPS001209	78%	100%	100%
ECO100647	ABA104991	36%	96.5%	92.3%
ECO100647	BPT100972	30%	94.1%	98.1%
ECO100647	BBU100236	28%	32.4%	32.1%
ECO100647	BCE102700	33%	92.2%	82.3%
ECO100647	BFU103489	32%	95.9%	92.9%
ECO100647	BMA107358	31%	70.3%	97.8%
ECO100647	CJU101021	23%	53.7%	55.1%
ECO100647	CPN200092	23%	95.3%	92.1%
ECO100647	CTR200810	28%	35.2%	34.9%
ECO100647	CAC101602	24%	29.7%	62.6%
ECO100647	CDP101117	24%	81.6%	90.6%
ECO100647	EBC102934	85%	99.6%	100%
ECO100647	ECO100647	100%	100%	100%
ECO100647	HIN100288	44%	97.1%	95.4%
ECO100647	HPY100177	23%	60.5%	66.8%
ECO100647	KPN302711	83%	100%	100%
ECO100647	LPN102781	30%	84.6%	98.6%
ECO100647	MCA100961	36%	96.3%	94.9%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100647	MAV106114	25%	97.3%	82.0%
ECO100647	MBV102260	26%	97.1%	94.9%
ECO100647	MLP100891	24%	96.9%	79.2%
ECO100647	MTU202018	26%	97.1%	57.9%
ECO100647	NGO101835	31%	97.1%	96.5%
ECO100647	NME200849	31%	97.1%	96.5%
ECO100647	PMU101032	45%	96.3%	94.0%
ECO100647	PRT102866	61%	96.5%	97.2%
ECO100647	PAE203981	40%	95.7%	95.1%
ECO100647	PPU107601	41%	94.3%	94.7%
ECO100647	PSY105070	41%	95.1%	95.7%
ECO100647	SPA102458	85%	76.2%	100%
ECO100647	STY101797	87%	100%	100%
ECO100647	TPA100249	25%	69.9%	72.0%
ECO100647	TPA100413	25%	75.6%	76.6%
ECO100647	VCH100942	48%	99.0%	99.2%
ECO100647	YPS001211	65%	99.6%	99.2%
ECO100648	ABA106059	43%	83.6%	89.6%
ECO100648	BFR10598	34%	86.6%	57.9%
ECO100648	BPT100973	42%	91.8%	89.8%
ECO100648	BBU100059	37%	79.8%	90.7%
ECO100648	BCE102638	45%	90.4%	88.1%
ECO100648	BFU103492	45%	88.4%	82.6%
ECO100648	BMA100300	44%	95.5%	89.3%
ECO100648	CPN200241	32%	70.5%	53.5%
ECO100648	CTR200696	30%	77.4%	60.7%
ECO100648	CDP100549	33%	91.1%	64.0%
ECO100648	EBC102935	94%	100%	100%
ECO100648	EFM200835	33%	85.6%	56.1%
ECO100648	ECO100648	100%	100%	100%
ECO100648	HIN100287	63%	97.3%	95.7%
ECO100648	KPN302676	96%	100%	92.7%
ECO100648	LPN103355	47%	86.3%	88.4%
ECO100648	LMO101012	30%	89.0%	61.8%
ECO100648	MCA100807	40%	93.8%	94.8%
ECO100648	MAV100201	36%	76.0%	51.8%
ECO100648	MBV102614	37%	76.0%	52.0%
ECO100648	MTU202330	37%	76.0%	52.0%
ECO100648	MGE100148	26%	66.8%	45.5%
ECO100648	MPN100672	25%	66.8%	45.5%
ECO100648	NGO101904	51%	90.8%	96.4%
ECO100648	NME200659	51%	90.8%	96.4%
ECO100648	PMU101033	64%	95.9%	93%
ECO100648	PRT102899	84%	99.3%	98.6%
ECO100648	PAE203980	51%	91.4%	96.1%
ECO100648	PPU112260	52%	91.4%	96.1%
ECO100648	PSY105068	52%	91.4%	95.7%
ECO100648	SPA102459	96%	100%	100%
ECO100648	STY101798	97%	100%	100%
ECO100648	SPN401776	34%	76.0%	49.7%
ECO100648	SPY200275	34%	79.1%	52.0%
ECO100648	TPA100641	35%	78.8%	86.0%
ECO100648	VCH100943	66%	96.9%	96.6%
ECO100648	YPS001216	86%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100652	BFR100448	41%	10.0%	16.5%
ECO100652	BPT101695	33%	97.7%	98.5%
ECO100652	EBC100475	77%	91.8%	100%
ECO100652	ECO100652	100%	100%	100%
ECO100652	KPN302701	78%	100%	100%
ECO100652	MBV101815	24%	79.8%	76.2%
ECO100652	MTU201729	24%	80.6%	68.9%
ECO100652	PMU101002	50%	98.5%	98.5%
ECO100652	PRT102895	60%	98.5%	97.7%
ECO100652	SPA102463	83%	100%	100%
ECO100652	STY101812	85%	100%	100%
ECO100652	STM101551	85%	100%	100%
ECO100652	VCH100947	52%	99.7%	96.7%
ECO100652	YPS001221	63%	99.5%	99.2%
ECO100659	BFR10535	28%	87.9%	90.3%
ECO100659	BMA106268	32%	16.5%	22.1%
ECO100659	CBO102186	30%	74.6%	96.5%
ECO100659	CDP101325	27%	70.4%	90.2%
ECO100659	EBC101470	91%	100%	100%
ECO100659	EFM101256	25%	92.9%	95.3%
ECO100659	ECO100659	100%	100%	100%
ECO100659	KPN301178	88%	100%	100%
ECO100659	LMO100695	30%	82.3%	82.2%
ECO100659	MAV103808	23%	79.8%	62.5%
ECO100659	MBV102332	22%	79.8%	78.8%
ECO100659	MTU408202	22%	79.8%	78.8%
ECO100659	PMU100683	54%	97.8%	98.3%
ECO100659	PRT100305	70%	98.5%	98.3%
ECO100659	PSY101979	30%	18.0%	33.3%
ECO100659	PSY105778	23%	49.8%	60.1%
ECO100659	SPA101689	93%	100%	100%
ECO100659	STY101819	94%	100%	100%
ECO100659	SMU100070	28%	74.1%	96.3%
ECO100659	SPN201158	27%	80.0%	83.9%
ECO100659	SPY201178	29%	74.9%	97.2%
ECO100659	VCH100976	60%	98.3%	99.0%
ECO100659	YPS001229	78%	99.8%	99.0%
ECO100661	BAN112647	36%	79.7%	93.1%
ECO100661	BAN106376	34%	90.6%	87.0%
ECO100661	BFR104796	64%	98.9%	97.4%
ECO100661	BBU100151	60%	98.5%	97.8%
ECO100661	BFU102111	22%	44.4%	19.7%
ECO100661	CAC101312	36%	92.9%	100%
ECO100661	CBO103757	38%	94.0%	98.0%
ECO100661	CDF100159	38%	40.6%	89.9%
ECO100661	CDF100928	38%	94.0%	98.0%
ECO100661	CDP101713	44%	79.7%	81.9%
ECO100661	EBC101472	93%	100%	100%
ECO100661	EFA201130	34%	92.9%	100%
ECO100661	EFM201449	33%	92.9%	100%
ECO100661	ECO100661	100%	100%	100%
ECO100661	HIN100134	74%	97.4%	95.9%
ECO100661	KPN301180	93%	100%	100%
ECO100661	LMO102723	39%	76.7%	83.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100661	MLP100363	25%	59.8%	64.0%
ECO100661	MTU401062	23%	76.3%	80.6%
ECO100661	MTU406545	27%	58.6%	83.3%
ECO100661	PMU100875	76%	100%	99.6%
ECO100661	PRT101157	75%	94.0%	97.3%
ECO100661	SPA101691	95%	67.7%	100%
ECO100661	STY101831	95%	100%	100%
ECO100661	SAU800569	35%	77.1%	81.3%
ECO100661	SEP200118	31%	90.6%	97.1%
ECO100661	SHA102516	37%	82.0%	90.5%
ECO100661	SMU100790	38%	77.1%	84.5%
ECO100661	SPN401271	32%	90.2%	94.2%
ECO100661	SPY201070	35%	79.3%	86.8%
ECO100661	VCH103743	79%	99.6%	99.6%
ECO100661	YPS001237	85%	100%	100%
ECO100662	BAN102604	46%	71.6%	100%
ECO100662	BAN102323	52%	71.6%	100%
ECO100662	BCE100659	55%	65.6%	98.9%
ECO100662	BFU102702	55%	74.1%	81.8%
ECO100662	BMA108578	54%	73.1%	98.5%
ECO100662	CTR200280	35%	10.6%	18.4%
ECO100662	CAC100601	48%	71.9%	98.8%
ECO100662	CBO100356	42%	18.8%	63.9%
ECO100662	CBO102223	38%	99.2%	99.1%
ECO100662	EBC101577	45%	70.7%	100%
ECO100662	EFA201939	40%	95.4%	95.6%
ECO100662	EFM200960	40%	96.6%	96.8%
ECO100662	ECO100662	100%	100%	100%
ECO100662	KPN301181	88%	99.8%	99.7%
ECO100662	MGE100071	32%	2.9%	20.9%
ECO100662	MPN100624	32%	2.9%	21.1%
ECO100662	PMU100876	43%	71.9%	99.8%
ECO100662	PRT101158	48%	100%	100%
ECO100662	PAE203758	50%	71.1%	98.4%
ECO100662	SPA101338	90%	99.8%	99.7%
ECO100662	STY101832	92%	99.8%	99.7%
ECO100662	STM101571	92%	99.8%	99.7%
ECO100662	SAU800189	39%	95.1%	95.2%
ECO100662	SEP201169	39%	96.0%	96.0%
ECO100662	SHA102201	38%	96.0%	98.9%
ECO100662	SMU100648	30%	95.8%	98.3%
ECO100662	SPY201526	31%	97.1%	96.6%
ECO100662	VCH100978	47%	71.8%	97.7%
ECO100662	YPS001239	52%	99.8%	99.7%
ECO100663	ABA100614	54%	70.2%	98.7%
ECO100663	BFR11594	52%	99.3%	98.3%
ECO100663	BPT101559	50%	99.1%	99.5%
ECO100663	BCE112007	56%	98.0%	97.7%
ECO100663	BFU109691	56%	98.0%	97.7%
ECO100663	BMA101111	57%	98.2%	93.5%
ECO100663	CDF100047	54%	98.4%	98.7%
ECO100663	EBC101578	94%	100%	100%
ECO100663	ECO100663	100%	100%	100%
ECO100663	HIN101320	76%	97.7%	97.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100663	KPN300629	92%	79.2%	100%
ECO100663	LPN102284	55%	7.2%	20.1%
ECO100663	LPN100517	56%	99.6%	99.8%
ECO100663	MCA100651	51%	99.1%	99.5%
ECO100663	NGO101291	60%	97.5%	97.7%
ECO100663	NME201607	60%	97.5%	95.8%
ECO100663	PMU100528	77%	98.0%	97.1%
ECO100663	PRT105627	85%	100%	99.6%
ECO100663	PAE201793	60%	99.1%	99.1%
ECO100663	PPU108911	62%	98.6%	96.8%
ECO100663	PSY100233	62%	98.2%	97.0%
ECO100663	SPA101340	95%	98.9%	100%
ECO100663	STY101833	95%	100%	100%
ECO100663	STM101572	96%	100%	100%
ECO100663	VCH100980	80%	100%	99.8%
ECO100663	YPS001246	87%	99.3%	99.1%
ECO100668	BCE111918	35%	49.2%	54.6%
ECO100668	BFU104827	30%	45.8%	59.8%
ECO100668	CBO100905	27%	70.8%	11.1%
ECO100668	EBC100041	81%	54.2%	100%
ECO100668	ECO100668	100%	100%	100%
ECO100668	KPN202849	81%	100%	100%
ECO100668	PMU100354	65%	70%	89.4%
ECO100668	PRT103333	83%	74.2%	91.8%
ECO100668	SPA102662	89%	80.8%	100%
ECO100668	STY101854	90%	80.8%	100%
ECO100668	YPS001261	86%	74.2%	93.7%
ECO100669	BAN106734	28%	46.5%	44.8%
ECO100669	BAN100793	32%	37.8%	33.3%
ECO100669	BAN108978	32%	37.8%	60.1%
ECO100669	BPT102964	23%	84.6%	68.9%
ECO100669	BFU101564	23%	92.1%	73.2%
ECO100669	EBC100042	68%	31.1%	97.5%
ECO100669	EFM201132	22%	53.1%	57.0%
ECO100669	ECO100669	100%	100%	100%
ECO100669	HIN100182	42%	98.8%	88.2%
ECO100669	KPN300270	85%	98.0%	100%
ECO100669	LPN102659	22%	95.3%	91.9%
ECO100669	LPN103657	28%	39.0%	36.2%
ECO100669	LMO100596	31%	41.7%	43.5%
ECO100669	MAV103780	24%	81.9%	72.4%
ECO100669	MBV106260	23%	81.9%	73.8%
ECO100669	MLP101364	22%	83.9%	75.3%
ECO100669	MTU200045	23%	81.9%	73.8%
ECO100669	MPN100323	42%	19.3%	17.6%
ECO100669	PMU100355	45%	94.5%	92.7%
ECO100669	PRT100195	58%	93.7%	89.8%
ECO100669	SPA102660	89%	100%	100%
ECO100669	STY101855	89%	100%	99.2%
ECO100669	STM104159	32%	45.3%	39.8%
ECO100669	SAU800615	22%	96.1%	93.9%
ECO100669	SHA101552	27%	37.4%	33.6%
ECO100669	UUR100019	23%	43.3%	38.4%
ECO100669	VCH102065	48%	92.5%	93.0%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100669	YPS001274	65%	99.6%	99.2%
ECO100672	CAC102879	34%	25%	8.6%
ECO100672	ECO100672	100%	100%	100%
ECO100683	ABA100225	26%	67.7%	56.8%
ECO100683	ABA100477	27%	24.1%	97.4%
ECO100683	BAN104847	19%	15.4%	26.9%
ECO100683	BAN109223	29%	7.2%	47.8%
ECO100683	BAN101440	29%	7.6%	42.7%
ECO100683	BAN110288	24%	23.0%	18.6%
ECO100683	BFR104422	62%	1.9%	27%
ECO100683	BCE104951	24%	86.2%	67.5%
ECO100683	BCE108121	27%	52.8%	59.9%
ECO100683	BFU100092	47%	6.3%	98.9%
ECO100683	BFU107935	31%	21.7%	7.3%
ECO100683	BFU100109	28%	14.8%	59.1%
ECO100683	BFU102581	29%	54.0%	49.1%
ECO100683	BMA107682	24%	50.1%	25.9%
ECO100683	CAC100404	29%	6.3%	31.6%
ECO100683	EBC107494	28%	9.8%	85%
ECO100683	EBC103412	28%	9.0%	59.2%
ECO100683	EBC104888	25%	64.4%	82.5%
ECO100683	ECO100686	96%	23.3%	68.1%
ECO100683	ECO101427	76%	37.7%	78.2%
ECO100683	ECO100488	77%	89.3%	88.2%
ECO100683	ECO103405	96%	89.3%	88.4%
ECO100683	ECO103515	96%	89.9%	91.2%
ECO100683	ECO100683	100%	100%	100%
ECO100683	PRT103688	31%	7.4%	73.6%
ECO100683	PRT103361	33%	8.1%	78.0%
ECO100683	PRT103421	25%	54.0%	66.8%
ECO100683	PAE202682	32%	90.6%	89.7%
ECO100683	PPU107712	33%	7.7%	93.1%
ECO100683	PPU110484	26%	21.5%	52.2%
ECO100683	PPU109654	25%	9.2%	55.3%
ECO100683	PPU107101	42%	3.9%	5.5%
ECO100683	PPU109653	28%	41.4%	38.3%
ECO100683	PPU109652	26%	55.8%	54.6%
ECO100683	PPU110482	26%	11.1%	5.4%
ECO100683	PSY108533	33%	5.0%	83.6%
ECO100683	PSY101322	59%	4.2%	24.3%
ECO100683	PSY105816	46%	7.4%	46.2%
ECO100683	PSY102083	24%	13.7%	11.8%
ECO100683	SPA106438	45%	6.1%	5.5%
ECO100683	SPA100247	27%	53.8%	67.7%
ECO100683	STY104094	25%	87.3%	77.3%
ECO100683	STY104095	30%	53.2%	39.6%
ECO100683	STM103807	45%	8.0%	46.3%
ECO100683	STM103806	25%	87.3%	76.6%
ECO100683	YPS002860	24%	86.3%	75.9%
ECO100702	ECO102977	37%	97.9%	97.8%
ECO100702	ECO100702	100%	100%	100%
ECO100702	PRT100741	24%	96.3%	94.1%
ECO100702	PRT100538	22%	95.7%	94.0%
ECO100702	PRT104405	27%	95.7%	98.3%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100702	PRT100936	26%	96.3%	98.9%
ECO100702	PRT105615	27%	95.7%	96.2%
ECO100702	PRT104834	26%	88.3%	87.4%
ECO100702	PRT104207	28%	88.3%	87.4%
ECO100702	PRT101358	32%	96.3%	97.3%
ECO100702	SPA102695	31%	95.7%	97.4%
ECO100702	STY104107	32%	95.7%	96.4%
ECO100702	YPS002768	38%	96.3%	94.6%
ECO100703	ABA104184	67%	97.9%	98.1%
ECO100703	BPT101628	62%	100%	99.5%
ECO100703	BCE109200	66%	98.6%	98.2%
ECO100703	BFU112530	65%	97.7%	97.2%
ECO100703	BFU100597	66%	99.8%	99.3%
ECO100703	BMA100455	66%	98.6%	98.2%
ECO100703	CJU101587	50%	93.4%	95.0%
ECO100703	CDP100042	50%	93.4%	93.9%
ECO100703	EBC101675	96%	100%	100%
ECO100703	ECO100703	100%	100%	100%
ECO100703	HPY100025	43%	93.4%	96.5%
ECO100703	KPN302561	95%	99.5%	100%
ECO100703	LPN103215	64%	98.8%	100%
ECO100703	MCA103218	62%	99.1%	99.1%
ECO100703	MAV104827	54%	98.6%	98.6%
ECO100703	MBV101665	52%	98.6%	98.6%
ECO100703	MLP101277	52%	98.6%	98.6%
ECO100703	MTU200887	52%	98.6%	98.6%
ECO100703	NGO101276	66%	97.2%	97.4%
ECO100703	NME201060	66%	97.2%	97.4%
ECO100703	PMU100276	71%	99.1%	99.1%
ECO100703	PRT102070	85%	99.8%	99.5%
ECO100703	PAE201579	70%	98.6%	98.4%
ECO100703	PPU107315	72%	98.4%	98.1%
ECO100703	PSY108243	72%	98.4%	98.1%
ECO100703	SPA100177	91%	78.0%	100%
ECO100703	STY101915	96%	100%	100%
ECO100703	VCH102060	77%	98.6%	97.9%
ECO100703	YPS002059	86%	100%	100%
ECO100706	ABA105020	52%	98.8%	97.2%
ECO100706	BPT101632	57%	99.7%	99.5%
ECO100706	BCE112329	55%	99.7%	98.8%
ECO100706	BFU100599	55%	99.7%	98.8%
ECO100706	BMA107039	55%	99.7%	98.8%
ECO100706	CTR100036	31%	92.2%	98.6%
ECO100706	EBC101678	96%	60.9%	100%
ECO100706	ECO100706	100%	100%	100%
ECO100706	HPY100189	35%	93.5%	82.1%
ECO100706	KPN301276	98%	100%	99.3%
ECO100706	LPN103357	69%	100%	100%
ECO100706	MCA101639	51%	99.7%	97.1%
ECO100706	MAV101732	48%	98.8%	99.0%
ECO100706	MBV103459	48%	98.8%	99.0%
ECO100706	MLP100428	47%	98.8%	99.0%
ECO100706	MTU203275	48%	98.8%	99.0%
ECO100706	NGO101280	56%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100706	NME201057	56%	100%	100%
ECO100706	PRT102073	92%	100%	100%
ECO100706	PAE201582	70%	98.8%	98.6%
ECO100706	PPU103107	69%	99.7%	99.5%
ECO100706	PSY104872	70%	96.8%	100%
ECO100706	SPA103275	78%	48.8%	100%
ECO100706	STY101918	97%	100%	100%
ECO100706	STM101667	97%	100%	100%
ECO100706	SHA100620	34%	59.5%	95.4%
ECO100706	VCH102057	82%	100%	100%
ECO100706	YPS002062	92%	100%	100%
ECO100712	ABA101768	71%	100%	98.3%
ECO100712	BAN108859	56%	100%	96.3%
ECO100712	BAN107819	65%	100%	96.3%
ECO100712	BFR12149	58%	98.6%	99.0%
ECO100712	BPT102810	54%	99.7%	100%
ECO100712	BCE103851	54%	99.7%	100%
ECO100712	BFU103478	52%	99.7%	100%
ECO100712	BMA108528	54%	99.7%	100%
ECO100712	CJU100496	58%	99.7%	99.7%
ECO100712	CPN200869	62%	98.6%	97.3%
ECO100712	CTR200204	61%	98.6%	97.9%
ECO100712	EBC102737	95%	100%	100%
ECO100712	ECO100712	100%	100%	100%
ECO100712	HIN101170	83%	100%	98.6%
ECO100712	KPN300770	94%	100%	100%
ECO100712	LPN101597	78%	99.3%	99.0%
ECO100712	LMO100662	25%	48.1%	38.4%
ECO100712	MAV101285	54%	100%	99.3%
ECO100712	MBV101961	54%	94.1%	92.7%
ECO100712	MLP100114	50%	99.7%	99%
ECO100712	MTU200943	54%	94.1%	92.7%
ECO100712	NGO101261	72%	100%	98.3%
ECO100712	NME201066	72%	100%	98.3%
ECO100712	PMU100281	86%	100%	100%
ECO100712	PRT102068	94%	99.7%	99.3%
ECO100712	PAE201588	88%	98.3%	96.3%
ECO100712	PPU101203	88%	98.3%	96.6%
ECO100712	PSY104865	88%	98.3%	96.9%
ECO100712	SPA103281	88%	99.3%	100%
ECO100712	STY101933	94%	100%	100%
ECO100712	STM101672	95%	100%	100%
ECO100712	SAU801246	65%	98.3%	94.0%
ECO100712	SEP201540	62%	98.3%	94.0%
ECO100712	SHA100180	64%	84.8%	93.9%
ECO100712	VCH102052	87%	99.3%	99.0%
ECO100712	YPS002067	90%	99.7%	99.3%
ECO100713	BAN101120	29%	80.8%	100%
ECO100713	BAN103767	30%	94.2%	95.0%
ECO100713	BPT101634	28%	94.2%	80.4%
ECO100713	BCE103528	36%	40%	66.2%
ECO100713	BCE107050	30%	82.5%	85.3%
ECO100713	BMA102686	30%	82.5%	85.3%
ECO100713	CAC103158	29%	95.4%	95.1%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100713	CBO100441	31%	96.2%	92.5%
ECO100713	CDF102412	32%	95.4%	96.2%
ECO100713	CDP100674	29%	93.3%	89.1%
ECO100713	EFA202447	32%	95%	97.0%
ECO100713	EFM201744	26%	95.4%	94.3%
ECO100713	ECO100713	100%	100%	100%
ECO100713	MCA101187	25%	86.2%	89.1%
ECO100713	MAV103447	30%	79.6%	70.4%
ECO100713	PPU107953	29%	95%	74.7%
ECO100713	SPA103556	29%	97.5%	95.5%
ECO100713	STY104116	29%	97.5%	95.5%
ECO100713	STM102067	24%	93.8%	92.5%
ECO100713	SEP200626	35%	28.3%	54.4%
ECO100713	SHA102044	28%	94.6%	95.4%
ECO100713	SMU100634	25%	95.8%	97.5%
ECO100713	SPN401698	31%	96.2%	98.3%
ECO100713	SPY200917	30%	96.2%	95.4%
ECO100716	ABA102257	69%	97.5%	96.6%
ECO100716	BAN108041	38%	96.6%	97.3%
ECO100716	BFR104147	43%	92.9%	99.4%
ECO100716	BPT102256	61%	95.6%	92.8%
ECO100716	BCE114299	55%	52.4%	99.6%
ECO100716	BFU102708	57%	53.9%	94.7%
ECO100716	BFU103213	77%	39.2%	98.1%
ECO100716	BFU102694	66%	98.1%	95.7%
ECO100716	BMA100835	62%	83.7%	97.6%
ECO100716	BMA109632	64%	99.2%	98.1%
ECO100716	CJU100072	45%	95.4%	96.3%
ECO100716	CPN200660	35%	95.6%	97.3%
ECO100716	CTR100525	30%	94.6%	96.6%
ECO100716	CDP100460	35%	92.0%	84.0%
ECO100716	EBC102736	94%	63.3%	100%
ECO100716	ECO100716	100%	100%	100%
ECO100716	HIN101051	64%	98.5%	99.8%
ECO100716	KPN300984	94%	96.0%	100%
ECO100716	LPN101998	59%	96.0%	98.4%
ECO100716	MCA100290	59%	97.7%	96.6%
ECO100716	PMU100974	68%	98.5%	99.8%
ECO100716	PRT103085	81%	95.4%	99.8%
ECO100716	PPU108559	31%	94.5%	91.6%
ECO100716	PSY107712	30%	89.7%	91.0%
ECO100716	SPA103282	95%	96.7%	100%
ECO100716	STY101934	95%	99.8%	100%
ECO100716	STM101673	96%	99.8%	100%
ECO100716	SAU801086	30%	95.8%	96.2%
ECO100716	SHA101846	29%	95.8%	96.9%
ECO100716	VCH103592	70%	98.3%	97.0%
ECO100716	VCH101814	74%	99.2%	95.9%
ECO100716	YPS002068	86%	99.8%	100%
ECO100725	ABA105807	25%	94.7%	97.3%
ECO100725	BFR102268	27%	43.0%	25.9%
ECO100725	BPT102433	25%	98.1%	99.1%
ECO100725	BBU100541	23%	43.0%	55.7%
ECO100725	BCE106489	25%	92.8%	92.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100725	BFU105257	24%	99.2%	98.8%
ECO100725	BMA107737	26%	100%	99.6%
ECO100725	CJU100103	20%	84.4%	78.7%
ECO100725	CDF103562	24%	39.2%	22.0%
ECO100725	EBC100263	85%	91.6%	97.6%
ECO100725	ECO100725	100%	100%	100%
ECO100725	HPY101257	25%	38.4%	17.4%
ECO100725	KPN300548	85%	100%	99.6%
ECO100725	LPN101284	31%	85.6%	72.7%
ECO100725	MBV103820	48%	12.5%	37.5%
ECO100725	NGO100180	25%	25.9%	30.0%
ECO100725	NME201512	20%	76.4%	74.8%
ECO100725	PRT100140	58%	99.6%	99.2%
ECO100725	PAE200973	36%	80.6%	77.0%
ECO100725	PPU108643	31%	94.7%	96.6%
ECO100725	PSY105481	41%	39.5%	93.7%
ECO100725	SPA100202	84%	74.5%	100%
ECO100725	STY101953	90%	100%	100%
ECO100725	STM101682	90%	100%	100%
ECO100725	TPA100980	24%	35.0%	9.4%
ECO100725	VCH101804	34%	98.9%	99.6%
ECO100725	YPS002077	69%	100%	100%
ECO100741	BPT100548	42%	96.0%	93.5%
ECO100741	BFU102456	40%	51.1%	80.7%
ECO100741	BFU115706	40%	51.7%	72.2%
ECO100741	EBC103505	88%	100%	100%
ECO100741	ECO100741	100%	100%	100%
ECO100741	HIN101656	53%	99.4%	99.7%
ECO100741	KPN305280	78%	100%	99.7%
ECO100741	MCA102353	44%	57.4%	91.9%
ECO100741	PMU100742	50%	99.4%	99.7%
ECO100741	PRT105509	62%	99.7%	99.2%
ECO100741	PAE201860	43%	99.7%	99.2%
ECO100741	PPU112554	42%	95.5%	94.8%
ECO100741	PSY105309	43%	94.3%	96.3%
ECO100741	SPA101804	91%	100%	100%
ECO100741	STY102291	91%	100%	100%
ECO100741	STM102051	91%	100%	100%
ECO100741	SAU802277	38%	57.4%	99.5%
ECO100741	SEP200346	37%	58.0%	98.1%
ECO100741	SHA102072	42%	56.8%	98.5%
ECO100741	VCH103445	49%	98.6%	96.2%
ECO100741	YPS002116	70%	99.1%	97.2%
ECO100748	CAC102362	27%	28.8%	40.8%
ECO100748	EBC103508	79%	100%	100%
ECO100748	EFM202173	28%	31.4%	45.6%
ECO100748	ECO100748	100%	100%	100%
ECO100748	KPN307027	77%	100%	100%
ECO100748	MLP100102	30%	14.1%	25.8%
ECO100748	SPA100494	59%	58.3%	99.2%
ECO100748	STY102294	86%	100%	100%
ECO100748	YPS000085	25%	28.6%	34.6%
ECO100757	ABA104944	30%	78.1%	83.9%
ECO100757	BAN113702	42%	45.9%	72.6%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100757	BAN111016	36%	86.3%	86.7%
ECO100757	BAN102075	36%	88.1%	87.0%
ECO100757	BAN106548	34%	100%	99.4%
ECO100757	BAN111025	34%	100%	100%
ECO100757	BFR100859	26%	46.2%	35.5%
ECO100757	BFR102551	21%	79.3%	60.3%
ECO100757	BPT101117	36%	98.2%	91.8%
ECO100757	BCE102679	33%	98.8%	92.7%
ECO100757	BFU105518	35%	91.8%	83.2%
ECO100757	BMA107904	35%	98.8%	100%
ECO100757	CJU100150	32%	92.7%	93.1%
ECO100757	CAC101752	31%	98.8%	100%
ECO100757	CBO102636	33%	98.8%	99.7%
ECO100757	CDF101204	29%	98.8%	100%
ECO100757	CDP101688	31%	86.0%	98.0%
ECO100757	EBC102210	89%	100%	100%
ECO100757	EFA202347	33%	98.8%	100%
ECO100757	ECO100757	100%	100%	100%
ECO100757	HIN101641	61%	99.4%	96.7%
ECO100757	HPY100755	27%	98.8%	99.7%
ECO100757	KPN303579	87%	100%	100%
ECO100757	LMO102857	31%	98.8%	99.1%
ECO100757	MCA103672	43%	99.1%	89.5%
ECO100757	MAV105594	35%	95.1%	87.4%
ECO100757	MBV102851	33%	92.4%	83.4%
ECO100757	MTU203069	33%	92.4%	85.5%
ECO100757	PMU100625	61%	98.8%	96.1%
ECO100757	PRT104379	73%	99.1%	99.4%
ECO100757	PAE201504	35%	99.4%	99.1%
ECO100757	PPU106301	36%	93.3%	92.2%
ECO100757	PSY105427	35%	98.2%	99.7%
ECO100757	SPA102732	91%	100%	100%
ECO100757	STY102330	92%	100%	100%
ECO100757	STM102089	92%	100%	100%
ECO100757	SAU802268	33%	100%	100%
ECO100757	SEP200319	32%	100%	100%
ECO100757	SHA101565	32%	100%	100%
ECO100757	SMU100479	23%	57.1%	50.4%
ECO100757	VCH101005	63%	100%	98.5%
ECO100757	YPS002149	78%	99.1%	99.4%
ECO100777	BPT102988	35%	92.2%	95.2%
ECO100777	BCE112934	54%	97.8%	95.4%
ECO100777	CAC102641	28%	89.2%	90.0%
ECO100777	ECO100777	100%	100%	100%
ECO100777	KPN303263	70%	99.7%	100%
ECO100777	PAE201251	32%	65.9%	69.8%
ECO100777	PPU110335	35%	67.0%	69.8%
ECO100784	BAN110623	55%	5.5%	81.1%
ECO100784	BAN108902	30%	31.7%	84.3%
ECO100784	BCE100234	33%	41.2%	84.5%
ECO100784	BFU111584	27%	72.5%	65.4%
ECO100784	CAC100165	28%	33.0%	88.1%
ECO100784	CBO103029	25%	28.4%	75.8%
ECO100784	CDP101252	28%	27.1%	60.3%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100784	EBC100646	89%	49.1%	100%
ECO100784	EFA201399	30%	32.6%	82.4%
ECO100784	ECO100784	100%	100%	100%
ECO100784	KPN306689	80%	92.6%	99.2%
ECO100784	LMO100404	28%	34.0%	92.2%
ECO100784	MAV104987	26%	33.8%	85.6%
ECO100784	MBV105868	27%	33.6%	89.3%
ECO100784	MTU203064	27%	33.6%	89.3%
ECO100784	PAE205116	23%	93.9%	97.8%
ECO100784	PPU108041	24%	92.6%	98.6%
ECO100784	PSY102229	25%	60.8%	77.4%
ECO100784	SPA100728	92%	34.9%	100%
ECO100784	STY102372	85%	94.3%	100%
ECO100784	SAU800361	30%	32.1%	87.7%
ECO100784	SEP201337	28%	32.1%	88.3%
ECO100784	SHA102218	31%	32.6%	89.1%
ECO100784	SMU101383	28%	29.4%	79.6%
ECO100784	SPN401595	29%	19.8%	79.6%
ECO100784	SPY201460	30%	28.2%	77.9%
ECO100785	BPT102642	71%	100%	99.2%
ECO100785	BCE104102	70%	100%	99.2%
ECO100785	BFU108289	57%	99.6%	86.0%
ECO100785	BMA103265	70%	100%	99.2%
ECO100785	CJU100833	51%	99.6%	98.8%
ECO100785	CAC102217	57%	99.2%	97.1%
ECO100785	CBO101000	56%	99.6%	92.3%
ECO100785	EBC100550	93%	61.2%	100%
ECO100785	EFA200968	56%	97.9%	95.9%
ECO100785	ECO100785	100%	100%	100%
ECO100785	KPN303595	93%	100%	100%
ECO100785	LPN103564	38%	98.8%	98.2%
ECO100785	SPA101969	91%	100%	100%
ECO100785	STY102373	95%	100%	100%
ECO100785	SHA100687	54%	93.3%	99.6%
ECO100785	SMU100131	57%	99.2%	96.7%
ECO100785	SPN400728	56%	99.6%	98.0%
ECO100785	YPS000346	83%	100%	100%
ECO100786	BAN105137	37%	93.2%	98.5%
ECO100786	BAN106432	38%	93.6%	87.8%
ECO100786	BCE107126	60%	100%	92.8%
ECO100786	BMA105276	60%	100%	100%
ECO100786	CJU100870	37%	97.3%	80.8%
ECO100786	EBC100624	93%	100%	100%
ECO100786	EFA201954	37%	97.3%	42.3%
ECO100786	EFM202037	33%	94.1%	94.9%
ECO100786	ECO100786	100%	100%	100%
ECO100786	HPY101152	27%	99.1%	98.2%
ECO100786	KPN303596	94%	100%	100%
ECO100786	LMO100160	38%	95.4%	42.7%
ECO100786	NGO100237	38%	98.2%	97.6%
ECO100786	NME201568	38%	98.2%	97.6%
ECO100786	PRT102830	34%	91.8%	79.1%
ECO100786	PAE205070	43%	95.0%	63.8%
ECO100786	PPU106787	45%	95.0%	63.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100786	PSY102557	39%	99.1%	97.7%
ECO100786	SPA101970	95%	99.5%	100%
ECO100786	STY102374	96%	100%	100%
ECO100786	SMU101490	38%	92.2%	40.8%
ECO100786	SPN400409	39%	92.2%	67.8%
ECO100786	SPY200205	37%	91.3%	40.0%
ECO100786	VCH103754	36%	92.2%	74.8%
ECO100786	YPS000343	83%	100%	100%
ECO100791	EBC102171	80%	99.8%	99.6%
ECO100791	ECO100791	100%	100%	100%
ECO100791	HIN101041	29%	77.6%	82.7%
ECO100791	HIN100985	31%	91.8%	92.5%
ECO100791	KPN301162	77%	98.7%	100%
ECO100791	LPN101642	24%	33.8%	27.8%
ECO100791	NGO100602	42%	24.3%	72.7%
ECO100791	NME101282	34%	86.1%	83.6%
ECO100791	PRT100704	35%	93.7%	95.3%
ECO100791	SPA102068	80%	74.6%	100%
ECO100791	STY102390	83%	99.8%	100%
ECO100798	ABA103859	41%	99.3%	99.6%
ECO100798	CBO103381	29%	94.8%	97.0%
ECO100798	CDF100774	31%	96.3%	98.5%
ECO100798	CDP100194	28%	97.0%	98.5%
ECO100798	EBC101153	80%	99.6%	100%
ECO100798	ECO100798	100%	100%	100%
ECO100798	KPN302749	81%	100%	100%
ECO100798	LMO102831	36%	98.5%	99.6%
ECO100798	MGE100271	23%	93.7%	96.0%
ECO100798	SPA100708	88%	99.3%	100%
ECO100798	STY102396	88%	99.3%	100%
ECO100798	STM102169	88%	99.3%	100%
ECO100798	SAU802525	36%	95.2%	97.4%
ECO100798	SEP201092	35%	96.3%	97.4%
ECO100798	SMU100886	36%	97.0%	98.5%
ECO100798	SPN401305	33%	97.4%	98.9%
ECO100798	SPY200407	29%	96.3%	99.6%
ECO100799	EBC101152	92%	94.0%	100%
ECO100799	ECO100799	100%	100%	100%
ECO100799	KPN302752	92%	100%	100%
ECO100799	SPA100176	95%	39.5%	99.1%
ECO100799	STY102397	95%	100%	100%
ECO100799	SMU101536	50%	99.0%	97.1%
ECO100799	SPN400232	50%	99.9%	98.7%
ECO100799	SPY201569	53%	99.0%	98.6%
ECO100808	BAN100561	50%	91.1%	100%
ECO100808	BAN104237	51%	91.1%	92.0%
ECO100808	BPT101723	71%	92.7%	94.0%
ECO100808	BCE106581	76%	93.4%	95.3%
ECO100808	BFU105826	76%	95.4%	96.3%
ECO100808	BMA100352	76%	93.4%	93.7%
ECO100808	CDP100606	41%	87.8%	98.2%
ECO100808	EBC102792	87%	100%	100%
ECO100808	ECO100808	100%	100%	100%
ECO100808	KPN302758	87%	100%	100%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100808	LPN102009	30%	71.9%	53.3%
ECO100808	MAV102744	36%	90.1%	93.8%
ECO100808	MBV101586	35%	90.1%	95.1%
ECO100808	MTU203610	36%	85.5%	97.4%
ECO100808	SPA101182	90%	100%	100%
ECO100808	STY102416	91%	100%	100%
ECO100808	STM102205	91%	100%	100%
ECO100808	SAU800207	37%	90.8%	70.8%
ECO100808	SPY201539	33%	74.6%	83.2%
ECO100809	ECO100809	100%	100%	100%
ECO100809	MCA102378	23%	13.9%	50.8%
ECO100809	SAU802073	32%	6.0%	9.9%
ECO100810	CAC100997	29%	36.0%	63.8%
ECO100810	CAC102604	28%	51.8%	91.3%
ECO100810	ECO100810	100%	100%	100%
ECO100811	ABA101330	68%	98.4%	98.2%
ECO100811	BFR102640	38%	97.3%	98.1%
ECO100811	BPT100744	73%	98.4%	99.1%
ECO100811	BCE106919	64%	98.6%	99.6%
ECO100811	BFU100161	64%	97.7%	100%
ECO100811	BMA105812	62%	97.7%	97.4%
ECO100811	CJU101372	34%	95.2%	95.2%
ECO100811	CPN200500	37%	99.1%	87.9%
ECO100811	CAC101960	36%	97.5%	97.3%
ECO100811	CBO102372	38%	97.5%	97.3%
ECO100811	CDF100866	39%	97.5%	98.0%
ECO100811	EBC102793	96%	100%	100%
ECO100811	ECO100811	100%	100%	100%
ECO100811	HPY100722	30%	95.0%	94.8%
ECO100811	KPN302759	94%	100%	100%
ECO100811	LPN100817	60%	42.0%	100%
ECO100811	MCA100109	62%	99.3%	86.8%
ECO100811	PMU101571	75%	98.4%	98.7%
ECO100811	PRT105016	87%	100%	99.5%
ECO100811	PAE200915	73%	99.1%	99.5%
ECO100811	PPU104571	71%	100%	100%
ECO100811	PSY104389	70%	91.6%	98.8%
ECO100811	SPA101181	97%	100%	100%
ECO100811	STY102418	97%	100%	100%
ECO100811	SPY200723	31%	16.8%	28.5%
ECO100811	VCH102583	77%	97.7%	91.7%
ECO100836	CPN200269	31%	88.5%	83.4%
ECO100836	CTR200650	29%	91.8%	86.1%
ECO100836	EBC100514	87%	100%	93.8%
ECO100836	ECO100836	100%	100%	100%
ECO100836	HPY101155	24%	84.4%	73.6%
ECO100836	KPN302146	87%	100%	98.0%
ECO100836	LPN100743	23%	99.2%	96.0%
ECO100836	LPN103487	27%	97.5%	98.3%
ECO100836	LPN102814	33%	94.7%	95.2%
ECO100836	LPN101937	26%	98.4%	97.6%
ECO100836	LPN103612	32%	97.5%	99.2%
ECO100836	MCA100559	35%	90.9%	84.4%
ECO100836	MCA102170	36%	95.5%	91.7%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100836	MCA100560	36%	92.6%	83.1%
ECO100836	PAE205148	42%	99.2%	96.4%
ECO100836	PPU109095	43%	89.3%	97.7%
ECO100836	SPA102374	91%	97.5%	100%
ECO100836	STY102490	91%	100%	100%
ECO100836	SEP100077	33%	90.1%	79.3%
ECO100836	SMU100993	32%	91.8%	82.7%
ECO100838	EBC104449	92%	75.2%	100%
ECO100838	ECO100838	100%	100%	100%
ECO100838	HIN101151	55%	95.4%	94.1%
ECO100838	KPN301800	91%	99.6%	99.6%
ECO100838	PMU100125	55%	95.4%	94.2%
ECO100838	PRT100750	67%	100%	100%
ECO100838	SPA100500	91%	45.4%	100%
ECO100838	STY102492	94%	99.6%	99.6%
ECO100838	VCH103478	53%	92.9%	89.1%
ECO100838	YPS001173	79%	100%	100%
ECO100844	BAN111580	48%	8.9%	77.5%
ECO100844	BAN100129	33%	66.2%	83.3%
ECO100844	BAN113145	35%	94.0%	98.8%
ECO100844	BFR13634	23%	95.4%	99.1%
ECO100844	EBC102012	88%	96.0%	100%
ECO100844	ECO100844	100%	100%	100%
ECO100844	KPN300042	88%	43.6%	96.2%
ECO100844	KPN301813	89%	96.6%	100%
ECO100844	LPN103633	35%	93.1%	97.6%
ECO100844	MAV100805	25%	92.6%	89.6%
ECO100844	MBV104384	23%	92.0%	88.1%
ECO100844	MTU201091	23%	92.0%	88.1%
ECO100844	PAE204359	31%	95.4%	99.7%
ECO100844	PPU101560	29%	94.0%	97.9%
ECO100844	PSY101773	30%	94.0%	97.9%
ECO100844	SPA100744	84%	100%	100%
ECO100844	STY102502	93%	96.6%	100%
ECO100844	SMU100712	25%	94.8%	95.1%
ECO100844	YPS002695	44%	94.3%	97.3%
ECO100844	YPS001180	73%	95.7%	99.1%
ECO100848	BCE111932	31%	95.0%	89.3%
ECO100848	BFU111768	29%	94.7%	88.1%
ECO100848	BMA108604	31%	95.0%	89.2%
ECO100848	CAC101222	26%	58.7%	70.5%
ECO100848	CBO101327	21%	65.5%	79.2%
ECO100848	CDF103953	36%	19.9%	9.8%
ECO100848	CDP100938	27%	88.5%	76.3%
ECO100848	EBC102313	86%	100%	100%
ECO100848	ECO100848	100%	100%	100%
ECO100848	KPN301808	89%	100%	100%
ECO100848	LPN100990	29%	96.6%	53.9%
ECO100848	MBV101709	28%	78.9%	68.7%
ECO100848	MTU203187	28%	78.9%	68.7%
ECO100848	PRT102449	55%	100%	100%
ECO100848	PAE205406	30%	94.7%	92.6%
ECO100848	PPU107514	27%	94.1%	91.6%
ECO100848	PSY102789	27%	95.7%	93.4%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100848	SPA100209	87%	95.7%	100%
ECO100848	STY102872	89%	100%	99.7%
ECO100848	YPS001188	59%	99.1%	97.4%
ECO100850	ABA101625	29%	92.7%	97.4%
ECO100850	BFR105073	28%	60.3%	97.1%
ECO100850	BFR10379	34%	60.3%	97%
ECO100850	CBO100922	37%	54.0%	86.9%
ECO100850	EBC102315	84%	94.9%	100%
ECO100850	ECO100850	100%	100%	100%
ECO100850	HIN101420	47%	60.3%	97.4%
ECO100850	KPN301812	82%	94.9%	100%
ECO100850	MCA102941	38%	93.7%	97.4%
ECO100850	NGO101297	39%	93.3%	97%
ECO100850	NME201609	39%	93.7%	97.3%
ECO100850	PMU100465	45%	94.9%	99.0%
ECO100850	PRT103160	59%	94.9%	100%
ECO100850	SPA100944	88%	94.9%	100%
ECO100850	STY102874	88%	94.9%	100%
ECO100850	VCH101132	52%	94.3%	98.3%
ECO100850	YPS001192	71%	94.6%	100%
ECO100851	ABA105899	66%	98.7%	99.1%
ECO100851	BAN110789	36%	95.2%	98.6%
ECO100851	BAN100809	43%	98.7%	46.2%
ECO100851	BCE113237	66%	99.1%	93.1%
ECO100851	BFU108967	66%	99.1%	89.6%
ECO100851	BMA109080	70%	95.7%	94.4%
ECO100851	CDF103952	26%	60.2%	46.6%
ECO100851	EBC102316	89%	100%	100%
ECO100851	EFA200743	45%	99.1%	99.5%
ECO100851	ECO100851	100%	100%	100%
ECO100851	KPN301409	90%	72.7%	94.4%
ECO100851	PAE204031	71%	99.1%	99.6%
ECO100851	PPU107265	69%	98.3%	97.0%
ECO100851	SPN401602	37%	97.4%	97.7%
ECO100852	BFU100163	23%	79.7%	75.4%
ECO100852	CBO101403	24%	31.7%	26.2%
ECO100852	EBC102317	84%	92.9%	100%
ECO100852	ECO100852	100%	100%	100%
ECO100852	KPN301415	86%	100%	100%
ECO100852	PMU100466	38%	99.3%	99.8%
ECO100852	PRT101841	55%	100%	100%
ECO100852	PPU100582	20%	79.7%	70.3%
ECO100852	PSY101212	22%	79.7%	72.5%
ECO100852	SPA101097	82%	61.6%	100%
ECO100852	STY102875	89%	100%	100%
ECO100852	STM102673	89%	100%	100%
ECO100852	VCH103268	43%	99.5%	97.7%
ECO100852	YPS001193	64%	100%	99.8%
ECO100867	ABA105367	43%	95.5%	99.5%
ECO100867	BAN106540	36%	80.5%	98.4%
ECO100867	BAN103047	39%	95.7%	97.9%
ECO100867	BFR11901	44%	95.5%	99.5%
ECO100867	BPT102656	54%	98.0%	98.2%
ECO100867	BCE114975	54%	95.7%	96.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100867	BFU101858	54%	93.1%	99.5%
ECO100867	BMA110026	54%	95.7%	96.8%
ECO100867	CJU100186	32%	84.8%	89.3%
ECO100867	CAC102995	47%	94.6%	94.8%
ECO100867	CBO100306	35%	91.9%	96.4%
ECO100867	CDF100879	35%	94.0%	96.5%
ECO100867	CDP100385	44%	95.5%	92.9%
ECO100867	EBC101259	94%	100%	100%
ECO100867	EFA202198	38%	91.5%	94.8%
ECO100867	EFM200319	38%	96.0%	92.4%
ECO100867	ECO100867	100%	100%	100%
ECO100867	HIN101557	73%	100%	100%
ECO100867	HPY101009	31%	84.8%	90.0%
ECO100867	KPN301123	95%	99.8%	100%
ECO100867	LPN101679	50%	87.5%	97.7%
ECO100867	LMO100087	37%	93.7%	99.1%
ECO100867	MCA101668	45%	90.2%	94.9%
ECO100867	MAV102138	44%	93.3%	90.4%
ECO100867	MBV100989	42%	95.1%	92.7%
ECO100867	MLP100308	42%	94.2%	87.5%
ECO100867	MTU202522	42%	95.1%	92.7%
ECO100867	NGO101204	54%	95.5%	96.6%
ECO100867	NME201305	54%	96.6%	97.7%
ECO100867	PMU100257	73%	99.8%	100%
ECO100867	PRT102616	85%	100%	97.8%
ECO100867	PAE202611	60%	97.8%	98.2%
ECO100867	PPU100863	59%	97.8%	98.2%
ECO100867	PSY104188	60%	96.6%	97.3%
ECO100867	SPA103469	95%	99.8%	100%
ECO100867	STY102895	97%	100%	100%
ECO100867	STM102717	97%	100%	100%
ECO100867	SAU801627	36%	90.6%	94.1%
ECO100867	SEP201572	35%	90.6%	94.3%
ECO100867	SHA100667	39%	38.0%	76.4%
ECO100867	SMU100656	36%	91.1%	95.0%
ECO100867	SPN401614	36%	91.1%	94.6%
ECO100867	SPY201532	37%	91.1%	94.8%
ECO100867	UUR100196	31%	91.3%	95.1%
ECO100867	VCH101089	73%	99.8%	99.6%
ECO100867	YPS001228	86%	100%	100%
ECO100868	ABA101808	66%	99.8%	99.8%
ECO100868	BAN101821	48%	96.0%	96.7%
ECO100868	BAN102446	52%	98.8%	98.8%
ECO100868	BFR104902	40%	98.1%	98.3%
ECO100868	BPT102654	55%	99.1%	98.9%
ECO100868	BBU100225	33%	99.8%	99.1%
ECO100868	BCE111542	55%	50.7%	98.2%
ECO100868	BFU101860	62%	99.3%	98.4%
ECO100868	BMA100713	62%	99.8%	98.4%
ECO100868	CJU100357	47%	98.1%	99.8%
ECO100868	CPN200980	40%	99.8%	98.8%
ECO100868	CTR200102	40%	99.8%	98.6%
ECO100868	CAC102168	46%	98.4%	98.6%
ECO100868	CBO103963	48%	99.8%	99.8%

Query LocusID	Homolog LocusID	Identity	Query Coverage	Homolog Coverage
ECO100868	CDF100043	49%	24.0%	90.6%
ECO100868	CDF100480	48%	98.4%	98.6%
ECO100868	CDF100128	47%	98.4%	98.6%
ECO100868	CDP100672	38%	98.4%	97.9%
ECO100868	EBC101260	92%	100%	100%
ECO100868	EFA202450	52%	99.8%	99.8%
ECO100868	EFA200752	53%	99.8%	99.8%
ECO100868	EFM202627	51%	99.8%	99.8%
ECO100868	ECO100868	100%	100%	100%
ECO100868	HIN100109	77%	100%	99.8%
ECO100868	HPY101459	47%	98.4%	100%
ECO100868	KPN301832	95%	74.4%	100%
ECO100868	LPN101085	58%	99.8%	99.3%
ECO100868	LMO102194	51%	99.8%	99.1%
ECO100868	MCA100776	60%	99.8%	99.8%
ECO100868	MAV103250	37%	98.4%	97.2%
ECO100868	MBV105246	36%	99.8%	99.0%
ECO100868	MLP100058	34%	98.4%	97.8%
ECO100868	MTU203779	36%	99.8%	99.0%
ECO100868	MGE100005	38%	98.6%	98.8%
ECO100868	MPN100149	38%	98.6%	98.1%
ECO100868	NGO100535	64%	99.1%	98.6%
ECO100868	NME201792	64%	99.1%	98.6%
ECO100868	PMU100258	77%	100%	100%
ECO100868	PRT102618	81%	100%	100%
ECO100868	PAE202610	65%	100%	100%
ECO100868	PPU100866	67%	99.8%	99.8%
ECO100868	PSY104164	66%	100%	100%
ECO100868	SPA103470	95%	100%	100%
ECO100868	STY102896	97%	100%	100%
ECO100868	STM102719	97%	100%	100%
ECO100868	SAU800009	51%	98.8%	97.9%
ECO100868	SEP201273	53%	98.8%	97.9%
ECO100868	SHA102263	52%	98.8%	97.9%
ECO100868	SMU101313	55%	99.8%	99.1%
ECO100868	SPN400372	55%	99.8%	94.8%
ECO100868	SPY201341	56%	98.8%	98.4%
ECO100868	TPA100639	33%	99.8%	98.8%
ECO100868	UUR100105	47%	98.4%	99.8%
ECO100868	VCH101091	71%	100%	100%
ECO100868	YPS001230	84%	100%	100%
ECO100869	BCE108240	28%	92.4%	98.1%
ECO100869	BFU105642	27%	96.1%	98.7%
ECO100869	EBC101397	90%	96.3%	100%
ECO100869	ECO100869	100%	100%	100%
ECO100869	HIN101025	74%	100%	97.4%
ECO100869	KPN301830	89%	100%	96.4%
ECO100869	PMU101754	74%	100%	93.5%
ECO100869	PRT105822	80%	99.6%	100%
ECO100869	SPA103471	90%	99.9%	97.9%
ECO100869	STY102898	92%	99.9%	96.3%
ECO100869	STM103286	93%	99.9%	96.3%
ECO100869	YPS000005	82%	99.9%	96.3%
ECO100875	BCE105376	36%	99.7%	96.5%